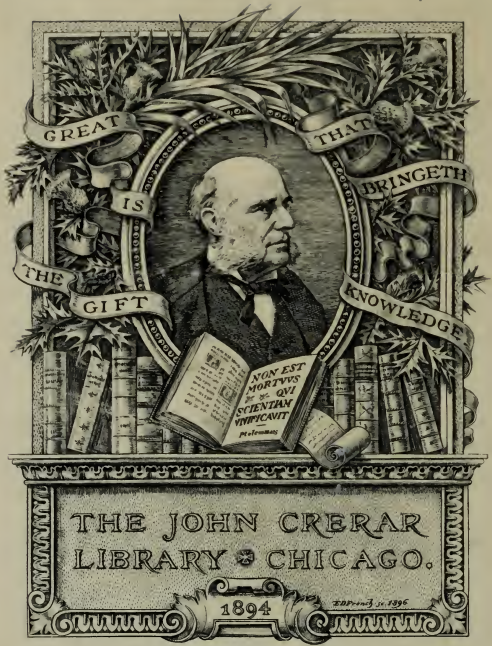

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University of Florida

Gainesville

Catalogue 1913-14

Announcements 1914-15

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The Southern Intercollegiate Athletic Association.

CONTENTS

	Page
CALENDARS	6
BOARD OF CONTROL	8
STATE BOARD OF EDUCATION	8
UNIVERSITY COUNCIL	8
OFFICERS OF THE UNIVERSITY	9
STANDING COMMITTEES	13
UNIVERSITY ADDRESSES	13
MILITARY ORGANIZATION	14

GENERAL INFORMATION

GIFTS	15
HISTORY	16
LOCATION	18
GROUNDS AND BUILDINGS	18
ENDOWMENT	20
EQUIPMENT	21
Library	21
Museum	21
Laboratories	22
Agricultural Equipment	24
Surveying Instruments	25
Shops	25
Athletic Equipment	25
GOVERNMENT AND REGULATIONS	26
HONORS	31
STATEMENT OF EXPENSES	32
University Charges	32
Fellowships	34
Scholarships	35
Opportunities for Earning Expenses	36
ALUMNI ASSOCIATION	37
STUDENT ORGANIZATIONS AND PUBLICATIONS	37
ADMISSION	39
Terms	39
Methods	39
Advanced Standing	46
Special Students	46

ORGANIZATION

GRADUATE SCHOOL	
Degrees Offered	48
Prerequisite Degrees	48
Requirements for the Master's Degree	48

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PAGE

COLLEGE OF ARTS AND SCIENCES

FACULTY ---- 50
GENERAL STATEMENT ---- 51
CURRICULA ---- 53
DEPARTMENTS OF INSTRUCTION ---- 55
Ancient Languages ---- 55
Courses in Latin ---- 55
Courses in Greek ---- 56
Biblical Instruction ---- 56
Biology and Geology ---- 58
Courses in Zoology ---- 58
Courses in Bacteriology ---- 59
Course in Geology ---- 59
Botany ---- 59
Chemistry ---- 60
English Language and Literature ---- 62
History and the Social Sciences ---- 64
Courses in History ---- 64
Courses in Economics ---- 65
Courses in Political Science ---- 65
Courses in Sociology ---- 65
Mathematics and Astronomy ---- 66
Military Science and Tactics ---- 67
Modern Languages ---- 68
Courses in French ---- 68
Courses in German ---- 69
Courses in Spanish ---- 69
Philosophy ---- 69
Physics ---- 72

COLLEGE OF AGRICULTURE

FACULTY ---- 74
GENERAL STATEMENT ---- 75
CURRICULA ---- 82
DEPARTMENTS OF INSTRUCTION ---- 87
Agronomy and Agricultural Engineering ---- 87
Agricultural Education ---- 89
Horticulture ---- 89
Animal Husbandry and Dairying ---- 91
Middle Course in Agriculture ---- 94
Short Courses in Agriculture ---- 97
Agricultural Meetings ---- 100
Correspondence Courses ---- 100

PAGE

COLLEGE OF ENGINEERING
- Faculty ---- 103
- General Statement ---- 104
- Curricula ---- 106
- Departments of Instruction ---- 110
  - *Civil Engineering* ---- 110
  - *Electrical Engineering* ---- 112
  - *Mechanical Engineering* ---- 113
  - *Mechanic Arts* ---- 115

COLLEGE OF LAW
- Faculty ---- 119
- General Statement ---- 120
- Curriculum ---- 125

TEACHERS COLLEGE AND NORMAL SCHOOL
- Faculty ---- 131
- General Statement ---- 132
- Teachers College ---- 134
- Curriculum ---- 135
- Departments of Instruction ---- 136
- Normal School ---- 140
- Practice High School ---- 148
- Correspondence Courses ---- 150
- State High School Inspection ---- 150
- Teachers' Employment Bureau ---- 151
- University Summer School ---- 152

SPECIAL DEPARTMENTS
- *Expression and Public Speaking* ---- 156
- *Music* ---- 156
- *Physical Culture and Athletics* ---- 157

DIVISION OF UNIVERSITY EXTENSION
- Staff ---- 158
- General Statement ---- 159
- Correspondence Courses ---- 167
- Farmers' Co-Operative Demonstration Work ---- 167
- Boys' Corn Clubs ---- 170
- Girls' Canning Clubs ---- 171

AGRICULTURAL EXPERIMENT STATION
- Staff ---- 172
- General Statement ---- 173

STATE NURSERY STOCK INSPECTION ---- 178

REGISTER

DEGREES, HONORS AND MEDALS ---- 182
ROLL OF STUDENTS ---- 184
SUMMARY ---- 195

UNIVERSITY CALENDAR

1914-1915

1914—June 15, *Monday*—Summer School begins.
August 7, *Friday*—Summer School ends.
September 22, *Tuesday*—Summer Recess ends. Examinations for Admission. Registration of Students.
September 23, *Wednesday*—First Semester begins.
October 3, *Saturday, 1:30 p. m.*—Re-examinations.
October 3, *Saturday, 2:30 p. m.*—Meeting of General Faculty.
November 26, *Thursday*—Thanksgiving Holiday.
December 19, *Saturday, 11:30 a. m.*—Christmas Recess begins.
1915—January 4, *Monday*—Christmas recess ends.
January 12, *Tuesday*—Ten-Day Course for Farmers begins.
February 2, *Tuesday*—First Semester ends.
February 3, *Wednesday*—Second Semester begins.
February 13, *Saturday, 2:30 p. m.*—Meeting of General Faculty.
March 6, *Saturday, 1:30 p. m.*—Re-examinations.
March 8, *Monday*—Review Course for Teachers begins.
June 5, *Saturday, 2:30 p. m.*—Meeting of General Faculty.
June 6 to 8—Commencement.
June 6, *Sunday*—Baccalaureate Sermon.
June 7, *Monday*—Oratorical Contests.
June 8, *Tuesday*—Graduating Day.
June 9, *Wednesday*—Summer Recess begins.
June 11, *Friday*—Examinations for Admission.
June 14, *Monday*—Summer School begins.
August 6, *Friday*—Summer School ends.
September 21, *Tuesday*—Summer Recess ends.

1914 CALENDAR 1915

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*Absent on leave.

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Stenographer to Extension Work.

MISS ETTA MEANS,
Librarian to the Experiment Station.

M. CREWS,
Foreman of the Experiment Station Farm.

A. G. COLCLOUGH,
Foreman of the Agricultural College Farm .

L. BYRD,
Superintendent of Buildings and Grounds.

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1914-1915

The President of the University is *ex officio* a member of all Standing Committees.

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Professors Farr, Keppel, Bernard, Davis, and Crandall.

ATHLETICS

Professors Cox, Trusler, Walker, Willoughby, and Farr.

DISCIPLINE

Professors Flint, Hughes, Walker, Cox, and Cawthon.

GRADUATE WORK

Professors Anderson, Vernon, Benton, and Thackston.

LIBRARY

Professors Bernard, Farr, Benton, and Mr. Hadley.

PUBLIC FUNCTIONS

Professors Davis, Crow, Floyd, and Crandall.

PUBLICITY

Professors Trusler, Willoughby, Crow, Thoroughgood, and Hathaway.

SCHEDULE

Professors Wiechardt, Flint, Thackston, and Vernon.

SELF-HELP

Professors Floyd, Wiechardt, Anderson, and Buchholz.

STUDENT ORGANIZATIONS

Professors Keppel, Cox, Hughes, and Thoroughgood.

UNIVERSITY PUBLICATIONS

Professors Crow, Benton, Farr, and Trusler.

UNIVERSITY ADDRESSES

[First Semester, 1913-14]

Sept. 24---"University Government and Ideals"
President A. A. Murphree.

Sept. 26---"Preservation of Health"
Professor E. R. Flint.

Oct. 8---"Rhodes Scholarships"
President A. A. Murphree.

Dec. 8---"The Open Mind"
Chief Justice Thos. M. Shackleford,
Supreme Court of Florida.

Dec. 17---"Student Ideals"
President Brown Ayres,
University of Tennessee.

MILITARY ORGANIZATION

MAJOR E. S. WALKER, U. S. A., *Retired,*
Professor of Military Science and Tactics.

FIELD, STAFF AND NON-COMMISSIONED STAFF.

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A. D. CAMPBELL----------*First Lieutenant and Adjutant.*
T. J. POPPELL----------*First Lieutenant and Quartermaster*
F. R. WEEDON----------*Sergeant Major.*

Company "A."	*Company "B."*	*Company "C."*
	CAPTAINS.	
R. P. TERRY,	U. C. BAILEY,	N. E. HAINLIN.
	FIRST LIEUTENANTS.	
S. R. WARD,	R. L. JOYNER,	C. A. ROBERTSON.
	SECOND LIEUTENANTS.	
N. McELYA,	W. A. WHITMIRE,	S. P. HARN.
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F. L. PRESCOTT,	T. T. YARBROUGH,	E. B. HELM.
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B. K. PANCOAST,	C. D. McDOWALL,	J. G. KERSHAW,
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R. K. VAN CAMP,	J. F. SIKES,	E. F. WILSON.
	CORPORALS.	
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R. A. GREEN,	J. M. TILLMAN,	C. C. CASWELL,
C. M. MANN,	J. A. JOHNSON,	R. M. COILE,
J. R. FARRIER,	A. W. RAMSDELL,	H. L. McMULLEN.

FIELD MUSIC.
C. B. GRACE.

BAND.

SERGEANTS.
G. D. HAMILTON, *Clarinet.* J. L. HEARIN, *Snare Drum.*

CORPORALS.
H. E. FREEMAN, *Alto.* F. LASSITER HOLLAND, *Trombone.*

PRIVATES.

W. R. BRIGGS, *Cornet.*	G. C. CROM, *Tuba.*
L. Y. DYRENFORTH, *Baritone.*	E. W. FREEMAN, *Alto.*
E. M. OGLESBY, *Tenor.*	H. G. REDSTONE, *Alto.*
L. P. SPENCER, *Trombone.*	R. SWANSON, *Cornet.*
F. L. THOMPSON, *Clarinet.*	D. E. WEST, *Bass Drum.*

GENERAL INFORMATION

GIFTS TO THE UNIVERSITY

The educational facilities of many of the State institutions of the South have in recent years been increased by substantial gifts. With deep gratitude the University acknowledges that it also has profited by this generosity. It feels confident that other broad-minded citizens will desire to help in its upbuilding. All gifts, of whatever nature or value, will be gladly received and acknowledged.

George Peabody Hall.—The State University and Commonwealth of Florida here record their grateful appreciation of the gift of forty thousand dollars ($40,000) from the Peabody Board of Trust. This has been used for the erection of a building, named the "George Peabody Hall," in honor of the great benefactor of the South, and devoted exclusively to the training of teachers for the public schools of Florida. Because of this bequest the State is now prepared to offer, at the University, the best facilities for the training of superintendents, high school principals, and teachers for every grade of the public school system.

Chair of Secondary Education.—This opportunity is taken of acknowledging the annual gift of seventeen hundred and fifty dollars ($1,750) by the General Education Board of New York toward the establishment and maintenance of a Professorship of Secondary Education in the University.

Scholarships.—No method of contributing to the spread of higher education is wiser or more beneficent than to give a worthy and ambitious young man the opportunity of availing himself of the advantages offered by his State University. The establishment of several scholarships is gratefully acknowledged. A list of these and the names of the donors will be found on pages 35 and 36.

For further *Donations and Loans* and *Concrete Dipping Vat,* see under Museum and under General Statement of the College of Agriculture.

HISTORY

Beginning with her territorial days Florida has always manifested interest in the higher education of her youth, and with this in mind has formulated many plans and has established many institutions. As early as 1824 the foundation of a University was discussed by the Legislative Council. In 1836 trustees for a proposed University were named, but these seem to have accomplished nothing. (*Memoirs of Florida,* 1,168.)

Upon its admission to the Union in 1845, the State was granted by the general government nearly a hundred thousand acres of land, the proceeds from which were to be used for the establishment of two seminaries, one east and one west of the Suwannee River. This led to the foundation at Ocala in 1852 of the East Florida Seminary, and of the West Florida Seminary at Tallahassee in 1856. The former of these institutions was, however, removed to Gainesville in 1866. The State Constitution of 1868 contained provisions for establishing and maintaining a University (*Art.* VIII, *Sec.* 2), pursuant to which the Legislature passed the next year "An Act to Establish a Uniform System of Common Schools and a University." The salient features of this Act show high ideals and purposes and would be a credit to any State. Other attempts to establish a University were made in 1883 by the State Board of Education and in 1885 by the Legislature. Furthermore the State Constitution, adopted later in the year 1885, expressly permitted special legislation with regard to a University.

Meanwhile in 1870 the Legislature had, in accordance with the terms of the "Land Grant College" Act of Congress of 1862, passed "An Act to establish the Florida Agricultural College." An Act supplementary to this was passed in 1872, and the State received from the general government ninety thousand acres of land, the proceeds from which were to be used in support of the proposed college. A site for the college was selected in 1873 and again in 1875. No educational work having been accomplished in the "temporary college edifice" at its second location, the trustees appointed a committee in 1878 to decide upon a more suitable situation. Not until 1883 was the third site selected—this time, Lake City. Here building operations were pushed forward as rapidly as possible, and upon the completion of the main building in the fall of 1884, the work of instruction was finally

begun. An attempt was made in 1886 by this institution to have its name changed to the "University of Florida," a title it finally secured by the Legislative Act of 1903. Before this, in 1887, the Florida Agricultural Experiment Station had, in accordance with the terms of the Hatch Act, been established as one of its departments and three years later the provisions of the Morrill Act provided a substantial increase in its annual income.

During these years, in addition to the new State University and the Florida State College at Tallahassee, four other institutions of higher education, all depending upon the State for support, had come one by one into existence. These were the Normal School at DeFuniak Springs, the East Florida Seminary at Gainesville, the South Florida College at Bartow, and the Agricultural Institute in Osceola County. In 1905, however, inasmuch as these had failed to make sufficient differentiation among themselves and to separate their work sufficiently from that of the high schools of the State, and inasmuch as the cost of maintaining all six seemed disproportionate to the results obtained, the Legislature decided to consolidate their activities at two closely co-ordinated institutions. This action, the "Buckman Act" of 1905, had, as its practical effect, the merging of the six schools into the "Florida Female College" at Tallahassee and the "University of the State of Florida." Both these institutions began their scholastic work in September, 1905. In 1909 an Act of the Legislature changed the name of the one to the "Florida State College for Women," of the other to the "University of Florida."

During the first session of the University a distinct Normal School, which included two years of Sub-Freshman grade, was maintained. In addition to this, instruction was given in agriculture and in engineering, as well as in the usual collegiate branches. Candidates for admission to the Freshman class must have finished the eleventh grade of a high school. The Agricultural Experiment Station was a separate division, although members of its Staff gave instruction to the students and although the President of the University acted as its Director. The next year the Staff of the Agricultural Experiment Station were required by the Rules and Regulations of the Department of Agriculture to devote their time exclusively to Station activities, and Mr. P. H. Rolfs was elected Director. The Normal

School was abolished and instruction in pedagogy was transferred to the University proper. Two years of Sub-Freshman work were, however, still offered.

Upon the election in 1909 of Dr. A. A. Murphree to the presidency, steps were taken to reorganize the University. The present organization went into effect in 1910. The College of Law was added in 1909 and the departments offering instruction mainly to normal students were organized into a distinct college in 1912. In 1913 the present entrance requirements went into effect.

LOCATION

Acting under powers conferred by the Buckman Act, the State Board of Education and the Board of Control in joint session, on the 6th day of July, 1905, selected Gainesville as the location for the University. During the scholastic year of 1905-06, that is, until suitable buildings could be erected at Gainesville, it was found necessary to carry on the work of the University at Lake City. Since the summer of 1906 the institution has occupied its present site.

The advantages that Gainesville presents as the seat of the University are numerous. It is centrally located and easy of access, being reached by the leading railroads of the State. It has well paved, lighted, and shaded streets, an exceptionally pure water supply, and a good sewerage system. The citizens are energetic, progressive, and hospitable. The moral atmosphere is wholesome, and for years the sale of intoxicants has been prohibited by law. The leading denominations have attractive places of worship.

GROUNDS AND BUILDINGS

The University occupies a tract of five hundred and eighty-nine acres, situated in the western extremity of Gainesville. Ninety acres of this tract are devoted to the campus, drill-ground, and athletic fields; one hundred and thirty-five acres are utilized for the farm of the College of Agriculture; the remainder is used by the Agricultural Experiment Station.

The University is one of the few institutions in the United States that made plans before laying the foundation of a single building for all future development of the campus, as far as this could be foreseen. Consequently the campus presents an har-

monious appearance. The liberality of the State has permitted the erection of buildings as fast as they were needed. Eleven have already been constructed, all of which are lighted with electricity, supplied with city water, and furnished with modern improvements. The latest appropriation made by the Legislature contains provisions for a handsome building for the College of Law, which has come to feel the need of a home.

These buildings are:

The two *Dormitories,* Thomas Hall and Buckman Hall, brick and concrete structures, three stories in height, sixty feet in width and three hundred and two hundred and forty feet, respectively, in length. They are built in fireproof sections, each containing twelve suites of dormitory-rooms and on each floor of each section a shower-bath, lavatories, and toilet.

The *Mechanic Arts Shop,* a one-story brick building, sixty feet long and thirty feet wide, with a wing thirty feet long and twenty feet wide. It provides for the shop work in the engineering, mechanic arts, and manual training courses.

Science Hall, a brick and concrete building of two stories and a finished basement, one hundred and thirty-five feet long and sixty-six feet wide. It contains the classrooms and laboratories of the Departments of Botany and Horticulture, Chemistry, Physics, and Biology and Geology.

The *Experiment Station Building,* a brick and concrete structure, of three stories and a finished basement, one hundred and twenty feet long and sixty feet wide. It contains the offices and laboratories of the Agricultural Experiment Station.

Engineering Hall, a brick and terra-cotta structure, three stories high, one hundred and twenty-two feet long and seventy-three wide, providing offices, classrooms, laboratories, and drafting-rooms for the Departments of Civil Engineering, Electrical Engineering, Mechanical Engineering, and Mechanic Arts.

The *Gymnasium,* a temporary wooden structure, one story high, sixty feet long and forty feet wide. It is provided with equipment for physical training, lockers, and showers. A swimming pool, thirty-six feet long, twenty-four feet wide, and from four and a half to seven feet deep, has recently been added.

The *Agricultural College Building,* a brick and concrete structure three stories high, one hundred and fifteen feet long and

sixty-five feet wide. The building provides for classrooms, laboratories and offices for the Departments of Agronomy, Animal Husbandry, and Extension Work. One-half of the second floor is used at present as a general assembly hall.

The *University Commons,* a brick building of one story and a basement, one hundred and fourteen feet long and forty-two feet wide, with a wing forty-nine feet long and twenty-seven feet wide. It provides a large dining hall and kitchen.

Language Hall, a brick and stone structure of three stories, one hundred and thirty-five feet long and sixty-six feet wide. It is the home of the College of Arts and Sciences, and provides classrooms and offices for the Departments of Languages, History, and Mathematics, together with the administrative offices of the University, and rooms for the use of the literary societies and the Young Men's Christian Association.

The *Teachers' College Building,* known as "George Peabody Hall," constructed with funds given by the Peabody Board of Trust. It is a brick building three stories high, one hundred and thirty-five feet long and seventy-two feet wide, and provides for the Departments of Education and Philosophy, and for the Teacher Training Work of the University. The general library of the University is at present in this building.

The *College of Law Building* will be a brick and stone structure of two stories, one hundred and twenty feet long and seventy feet wide. It will contain an auditorium, model court room, lecture-rooms and offices, library, reading and consultation rooms, cataloguing room, and quarters for the Marshall Debating Society.

VALUE.—The value of the property used for the work of the University is about $660,000.

ENDOWMENT

The annual income of the University, apart from legislative appropriations, is derived principally from the following Federal grants: (a) The "East Florida Seminary Fund," amounting to about two thousand dollars ($2,000); (b) the "Agricultural College Fund" bonds, yielding about seventy-seven hundred dollars ($7,700); (c) one-half of the "Morrill Fund," amounting to twelve thousand five hundred dollars ($12,500); (d) one-half of the "Nelson Fund," yielding twelve thousand five hundred

dollars ($12,500). The total income thus derived amounts to thirty-four thousand seven hundred dollars ($34,700).

For the support of the Agricultural Experiment Station the Federal government makes two annual grants—(a) the "Hatch Fund" and (b) the "Adams Fund." Each of these amounts to fifteen thousand dollars ($15,000).

EQUIPMENT

LIBRARY.—The University Library numbers about 15,000 volumes. Additional books are purchased as fast as funds are available. An effort is being made to place on the shelves all books extant relating to Florida history.

All books in the library are catalogued and shelved according to the Dewey system, making them readily available for reference. Students are encouraged to use the card catalogues, which are arranged alphabetically, both according to authors and to subjects, and to become familiar with the books themselves by free access to the stacks. The librarian or a student assistant is always in attendance to explain the arrangement of books and to give aid in reference work. A taste for literature and information is being developed in many students who, before entering the University, have not had access to a good library.

As a designated depository of Federal documents, the library receives each year several hundred volumes of valuable government publications. Files are kept of all Florida State publications, and of the bulletins and reports of the Agricultural Experiment Stations throughout the Union.

In the reading-room are one hundred and three of the best general and technical periodicals. The back numbers of these are bound and kept on file, and the early volumes purchased whenever they can be obtained and funds permit. Here also are received the leading newspapers of the State. County papers are added to the list at the request of the students.

The technical departments possess special libraries, housed in their respective buildings, but accessible to all members of the University.

MUSEUM.—The Museum, which occupies a large room on the second floor of Science Hall, has recently been equipped throughout with new cabinets. It contains a splendid collection of birds and eggs accumulated by Mr. R. D. Hoyt, of Clearwater, Fla.

This collection, which represents the work of years, contains over 200 mounted birds and about 700 unmounted skins of North American birds, all in excellent condition. There are also complete sets of eggs of about 500 species. The collection is especially valuable since it contains many rare forms, some of which it would be almost impossible to replace.

The Museum also contains an excellent collection of eggs presented by Mr. Lee Graham, of Gainesville, and a large number of eggs and nests lent by Mr. O. E. Baynard. In addition there is an extensive collection of shells and other invertebrates, notably insects.

The geological collections include specimens of most of the more important minerals and rocks and also many fossils and casts.

Laboratories.—The following laboratories are maintained by the University:

The *Botanical Laboratory* contains enough dissecting microscopes and instruments, and Bausch and Lomb compound microscopes, magnifying from 80 to 465 diameters, for the individual use of the students; a Zeiss binocular microscope; a large compound microscope of very high magnifying power; two demonstration microscopes; and a McIntosh stereopticon, with projection microscope attachment. For work in histology there are hand microtomes, section knives, a sliding microtome, Millers' paraffin bath, and a supply of reagents, stains and mounts; for studies in physiology there are germination boxes, nutrient jars, an osmometer, a clinostat, and a number of other pieces. An herbarium has been started, to which students each year add specimens which they collect, identify and mount. A case of reference books and periodicals is in the laboratory within easy reach of the students.

The *Chemical Laboratory* is equipped with all the necessary apparatus and material for instruction in general inorganic and organic, analytical and industrial chemistry, as well as for advanced work. It contains two delicate balances, a latest model polariscope, microscope and spectroscope, ample platinum ware (in the form of crucible dishes, electrodes, wire, and foil), and many special pieces of apparatus for illustrating, upon the lecture table, chemical principles. The equipment is modern in every respect and in the new rooms assigned to it can be used to the

best advantage. The stock of chemicals is abundant and complete.

The *Dynamo Laboratory,* providing for practical instruction on electrical machinery, occupies a portion of Engineering Hall. The principal machines are a 10-KW Type ACS General Electric synchronous converter, a 2.5-KW General Electric Type IB direct current generator, a 1-HP Westinghouse Type R motor, a 1-KW synchronous motor, and two 2-KW Westinghouse Type S dynamos, designed to be used either as generators or as motors. The switchboard panel for each machine is placed near it, but is connected to terminals on a main distribution board for the whole laboratory. Power is supplied by a 10-HP single-phase Wagner induction motor, connected to the city alternating current supply, and driving the main shaft of the laboratory. The various machines are driven from this shaft, and can be thrown in or out by friction clutches.

The laboratory is also supplied with transformers, several types of arc lamps, and numerous measuring instruments of different ranges, chiefly of Weston make.

The *Geological Laboratory* contains the United States Geological Survey Educational Series of rocks. Students of Historical Geology are provided with a collection of fossils illustrating the distribution and development of organisms. For the study of mineralogy there is a blowpipe collection of one hundred selected mineral species; an accessory blowpipe collection of miscellaneous minerals; a crystal collection of fifty natural crystals; and a reference collection of choice mineral specimens.

The *Physical Laboratory* is well equipped with apparatus, and meets the needs of such undergraduate work in physics as is usually carried on in the best American colleges. The western half of the ground floor of Science Hall is devoted to the Department of Physics. Its quarters include a lecture-room, 25 feet by 23 feet, with amphitheatered seats; an office and library room; a main laboratory room, 28 by 25 feet; an electrical laboratory, 30 by 14 feet; a battery room; an optical room, 23 by 10 feet, arranged so as to be effectively darkened; a workshop; a store-room; and a private laboratory room, for research work. Water, gas, and electricity from various circuits, are led to all of the rooms. The laboratory is provided with several brick piers, on foundations independent of the rest of the build-

ing, for the accommodation of instruments requiring special stability.

The *Zoological and Bacteriological Laboratories* are well equipped for the work of instruction. In addition to the necessary glassware and reagents, there are a number of high-grade microscopes; dissecting microscopes; two microtomes, one for celloidin, the other for paraffin sectioning; paraffin bath; sterilizers, both wet and dry; warm and cool incubators; dark-ground illuminator; balances; centrifuge; breeding cages; anatomical preparations and models; a number of the Leukart-Chun zoological wall charts; one Leitz large compound microscope with mechanical stage and a full set of apochromatic objectives; and one Bausch and Lomb projecting lantern with accessories. The departmental library contains a number of the current periodicals as well as the more important text-books and reference works.

The *Psychological Laboratory* occupies six rooms on the first floor of Peabody Hall, and is well equipped for class demonstrations, and for carrying on experimental and research work in psychology. As demand arises new equipment will be added. In addition to the apparatus for the regular experimental work, the laboratory is well equipped for carrying on the mental and physical tests in connection with the work in educational psychology offered by the Teachers College.

The *Mechanical Engineering Laboratory* has a 50,000 pound testing machine for testing the strength of materials, a large and small vertical steam engine, a pressure blower, a fan blower, a boiler feed pump, an indicator, and a steam gauge tester, and it is expected to have these erected in the new laboratories at an early date. The large water tube boilers installed for the heating plant are also available for testing purposes in these laboratories.

The *Computing Room* is furnished with all necessary tables and a library of about two hundred reference books for use in connection with the work of the mechanical laboratories and draughting room.

The *Draughting Room* is equipped with substantial oak desks and possesses the necessary minor equipment to accommodate classes of twenty-four students. It has been carefully designed for the purpose and the aim is to make it a model of its kind.

Agricultural Equipment.—The College of Agriculture is

exceptionally well equipped for every branch of its work. Among other things it has well designed laboratories for instruction and investigation in such subjects as soils, field crops, dairying, and agricultural engineering. Its farm has the necessary barns, propagating house, irrigating plant, cold frames, and nurseries. For its work in the department of Animal Husbandry it has well selected live stock and poultry. Its dipping vat, paddock, and scales are of the best. A full description of the equipment will be found in the General Introduction to the College of Agriculture.

Surveying Instruments.—These consist of three surveyor's compasses; three wye levels, two dumpy levels, and one precision level; two plain and four stadia transits, of which three are equipped with attachments for solar and star observations; one complete plane table; and the necessary rods, chains, tapes, and minor apparatus.

Shops.—The *Wood-Shop* is provided with lockers, equipped with full set of tools for bench-work, such as chisels, squares, saws, gauges, etc. The wood-working machinery consists of nine wood-turning lathes, a planer, rip-saw, band-saw, and trimmer.

The *Machine-Shop* is equipped with an 18-inch Cady lathe, an 11-inch Seneca Falls lathe, a drill press, a Gray Planer, a No. 1 Brown & Sharpe Universal Milling Machine, a Springfield shaper, a small Barnes lathe, three emery wheels, grindstone, vises, machine-shop tools.

The *Forge-Shop* is equipped with six power-blast forges, one hand forge, six anvils, and a large supply of tools.

Athletic Equipment.—The institution has provided a hard surfaced athletic field, including football gridiron, baseball diamond, with grandstand and enclosed field, and ample tennis court facilities. A basket-ball court and concrete swimming-pool are also located on the campus.

The equipment of the gymnasium represents an expenditure of some $3,000.00, and this collection of apparatus is probably unsurpassed in the South.

GOVERNMENT AND REGULATIONS

ADMINISTRATION

Board of Control.—The general government of the University is vested by law in the Board of Control, which consists of five members from various parts of the State, appointed, each for a term of four years, by the Governor of Florida.

The Board of Control appoints the President, and upon his nomination, elects members of the Faculties, directs the general policies of the University, and supervises the expenditure of its funds. The Board also prescribes the requirements for admission, with the advice of the President and Faculties, and upon their recommendation confers degrees.

President.—The direct administration of all affairs of the University is in the hands of the President.

Deans and Directors.—Each college of the University (for organization see page 47) has as its executive head a dean, appointed from the Faculty of that college; the Division of University Extension and the Agricultural Experiment Station have as executive head a director. These officers are responsible to the President.

University Council.—The President and Vice-President of the University, the Deans of the several colleges, and the Director of the Experiment Station form a council of administration, with the following functions: To lay out new lines of work, inaugurate new enterprises in general, and prepare the annual budget; and to act as the judicial body of the general faculty on cases of general discipline not under the authority of the colleges, on new courses of study and changes in existing courses, bringing these matters before the Board of Control, and on questions of college action referred to it by any member of the general faculty.

Faculty.—The General Faculty of the University includes all persons engaged in the work of instruction in the University, excepting laboratory assistants and under-graduate assistants to the professors. Under the leadership of the President it forms the general governing body in all matters of instruction and discipline.

The Faculty of a college consists of those members of the General Faculty who give instruction in it. Under the leadership

of its Dean, it forms the governing body in matters of instruction and discipline in its college.

Agricultural Experiment Station Staff.—The Staff consists of all persons engaged in scientific work in the Station. Under the leadership of the Director, it has authority in all matters of agricultural investigation and their publication.

DISCIPLINE

Officers.—An *Officer in Charge,* occupying quarters in one of the dormitories, has immediate supervision of the general life of the student-body.

In each section of the dormitories a *Monitor* maintains a general oversight and makes reports to the Officer in Charge. Monitors are appointed from among those students who are more than twenty-one years of age.

Offenses Against Good Conduct.—Any offense against good conduct, in the ordinary meaning of the word, renders a student liable to discipline, whether or not a formal rule against the offense has been published.

The following offenses will be treated with especial severity: Disrespect to an officer of the University; wanton destruction of property; gambling; drunkenness, or having intoxicating liquors in possession on the University grounds.

The use of intoxicating liquors at student functions of any kind or by student groups, either on or off the campus, is strictly forbidden.

Hazing.—No form of hazing will be tolerated in the University, and no student will be assigned to a room in a dormitory until he has matriculated and signed the following pledge:

"I hereby promise upon my word of honor, without any mental reservation whatsoever, to refrain from all forms of hazing while I am connected with the University of Florida."

Absence from the University.—No undergraduate student is permitted to be absent from the University over night without written permission from the Officer in Charge.

Absence from Classes.—A student who accumulates ten unexcused absences from classes, or three unexcused absences from drill, will be given a severe reprimand, and parent or guardian will be notified. Two additional unexcused absences will cause the student to be dismissed from the University. Ten

unexcused absences from the chapel service will subject all students, except Seniors and those in the College of Law, to the same penalty.

Attendance Upon Duties.—A student who, without good cause, persistently absents himself from his University duties, is, after due warning, dishonorably dismissed for the remainder of the academic year. A student who, by reason of ill health or outside demands upon his time, finds it impossible to give regular attention to University duties, is requested to withdraw; but such request does not in any way reflect upon his good standing.

All delinquencies in University duties are reported to the Officer in Charge, who brings them to the attention of the students, and requires a prompt explanation to be made. Careful records of all delinquencies are kept.

STUDIES

Quantity of Work.—A minimum and maximum number of recitation hours (or equivalent time in laboratory courses) per week is prescribed in each college, and no student may take less than the minimum or more than the maximum except by special permission of the Faculty of his college. Not counting Military Science, these numbers are: in the College of Arts and Sciences, 15 and 18 respectively; in the College of Agriculture, 16 and 23; in the College of Engineering, 15 and 23; in the College of Law, 15 and 18; and in the Teachers College, 15 and 19.

In counting hours, two hours of laboratory work are considered equivalent to one hour of recitation.

Conflicts.—Studies must be so chosen as not to conflict, as shown on the printed schedule for the year.

Assignment to Classes.—Every student must appear before the Dean of his college at the beginning of each academic year for assignment to classes. An individual instructor has no authority to enroll a student in any course, except as authorized by the Dean of his college.

Choice of Studies.—The choice as to which one of the various curricula is to be pursued rests entirely with the individual student, subject to considerations of proper preparation; but the group of studies selected must be that belonging to one of the regular years in the chosen curriculum exactly as announced in the catalogue, unless special reasons exist for deviating from this

arrangement. A student will, however, be held to the requirements of the catalogue under which he entered.

CONDITIONS.—A student who is prepared to take up most of the studies of a certain year in the regular curriculum, but is deficient in some studies, will be permitted to proceed with the work of that year. Such a student is said to be *conditioned;* he is permitted to proceed subject to the *condition* that he make up the studies in which the deficiency occurs. This should be done, when possible, by study with a private tutor, and examination as soon as the work is completed; but it may be done by pursuing the studies in question with a lower class in the University, and the Dean of the college in which the student is enrolled has authority to require it to be done in that way when such procedure seems best. In every case, provision for all of the lower studies must be made before any of the higher studies may be taken; and in the event of conflicts in the schedule, or excessive quantity of work, higher studies must give way to lower.

EXTRA STUDIES.—By special permission from the Dean of his college, a student may take extra studies in addition to those prescribed in his regular curriculum, provided this can be done without conflicting with a regular study or exceeding the maximum number of hours of study. Such permission is not, as a rule, granted to any conditioned student; and it may be withdrawn from any student in the event of failure in any of the regular studies.

SPECIAL STUDENTS.—Students who may desire to take special courses will be allowed to take those classes for which they may be prepared. Such students are subject to all the laws and regulations of the University. These special courses do not lead to any degree.

The purpose of permitting students to take special courses, other than those regularly offered, is merely to provide for the occasional exceptional requirements of individual students; and any abuse of this privilege, for the sake of avoiding regular studies which may be distasteful, cannot be tolerated. Accordingly, no minor student is permitted to enter as a special student except upon written request of his parent or guardian.

CLASSIFICATION OF IRREGULAR STUDENTS.—A student is deemed to belong to that class in which the majority of his hours of work lies. But a special student is not considered as belonging to any of the regular classes.

Changes in Studies.—After a student is once registered, he is not permitted to discontinue any class, or to begin any additional one, without written permission from the Dean of his college, which must be shown to the instructor involved. If the student has been registered for two weeks, he will not be permitted to make any change in his course without the payment of a fee of two dollars ($2.00).

Grades and Reports.—Each instructor keeps a record of the quality of work done by each student in his classes and assigns grades, on the scale of 100. At the end of each month the average grades for the month of each student are reported to the office of the University for permanent record and for entry upon a monthly report to his parent or guardian.

If the monthly grades show that a student is not doing satisfactory work, he may be required to drop some of his studies and substitute studies in a lower class, or he may be required to withdraw from the University.

Examinations.—At the end of each semester regular examinations are held on all of the work of that semester.

Failure in Studies.—A final grade for each semester's work is assigned, based upon the examination and the monthly grades. If this grade falls below 60, the student is considered to have failed, and may proceed only subject to a condition in the study in which failure has occurred. The passing grades in this and the following paragraph do not apply to students in the College of Law.

Re-examinations.—A student who has failed in the work of a semester is allowed, in case his grade does not fall below 50, to make up the condition by re-examination, on the first Saturday of March or the first Saturday of October. To pass by re-examination, a grade of 70 must be attained. Only one re-examination in any subject is allowed a student; in case of failure to pass, he must repeat the whole semester's work in the subject concerned.

ATHLETICS

Absences on Account of Athletics.—The members of regular athletic teams, together with necessary substitutes and a manager, are permitted to be absent from University duties for such time, not to exceed nine days per semester, as may be clearly

necessary to take part in games away from Gainesville. All class-work missed on account of an athletic trip must be made up as promptly as possible after returning at such hours as may be arranged by the various professors.

Schedule of Games.—The schedule of games must be arranged so as to interfere as little as possible with University duties, and must receive the approval of the Committee on Athletics. All regular games will be scheduled with members of the Southern Intercollegiate Association or with colleges that have signed an agreement to play under Association rules.

Eligibility to Athletic Teams.—Any team playing under the name of the University of Florida must be composed exclusively of genuine students in good standing in the University. A list of the players and substitutes for each game must be submitted to the Committee on Athletics before that game, and must receive its approval. Negligence of duties, or failure in studies, excludes a student from the right to play on a team representing the University.

No student is permitted to play on any of the regular teams, who, in the opinion of the University physician, is not in proper physical condition. No minor student is permitted to play, if his parent or guardian objects to his doing so.

HONORS

Phi Kappa Phi.—A chapter of the Phi Kappa Phi Honor Fraternity was established at the University during the spring of 1912. This society has for its main aim the encouragement of learning and of high ideals. To be eligible for membership a student must have been in attendance at the University for at least three semesters, have been guilty of no serious breaches of discipline, and in addition have finished five-eighths of a course leading to a degree. The number that can be elected is limited to the first third of the Senior class of the University, and to the first sixth of the Junior class of each of the various colleges. The numerical grade which must be attained is based on all college work, whether done here or elsewhere, for which the student receives credit toward his degree. As a grade five per cent higher is required of Juniors than is demanded of Seniors, it is a greater honor to gain election in the Junior year.

Medals.—Medals are offered in the University (1) for the

best declaimer in the Freshman and Sophomore classes; (2) for the best original oration in the Junior class of any college; (3) for the best original oration in the Senior class of any college. These contests are settled in public competition at Commencement. The speakers are limited to four from each class, and are selected by the Faculty.

Through the liberality of Mr. H. H. Buckman, of Jacksonville, Florida, a handsome medal is offered annually to the student of the College of Engineering making the highest average grade for the year.

STATEMENT OF EXPENSES

UNIVERSITY CHARGES.—*Tuition.*—In the College of Law a tuition fee of forty dollars ($40.00) per year is charged. In the other colleges a student whose home is in Florida is subject to no charge for tuition; a student who is a non-resident of the State is required to pay a tuition fee of twenty dollars ($20.00) per year.

Registration Fee.—A registration fee of five dollars ($5.00) per year is charged all students, except one scholarship student from each county in Florida.

In order to secure this exemption the scholarship must be filed with the auditor on the day of registration. These scholarships are to be obtained from County Superintendents of Public Instruction.

An additional fee of two dollars ($2.00) is required of students who enter after the day scheduled for registration.

Damage Deposit.—In order to secure the University against damage, the sum of five dollars ($5.00) must be deposited at registration. Damage known to have been done by any student will be charged to his individual account; other damages will be prorated among the students.

At the end of the scholastic year this deposit, less the amount deducted, will be returned to the student. No orders for the disbursement of sums remaining to the credit of individual students will be recognized by the auditor until after the close of the second semester.

Infirmary Fee.—An infirmary fee of three dollars ($3.00) is charged each student, the proceeds of which go towards defraying the salary of a resident nurse. This secures for the stu-

dent, in case of illness, the privilege of a bed in the infirmary (which occupies Section A of Thomas Hall), the services of the nurse, and attention from the University physician, E. R. Flint, M.D. (Harvard).

Board and Lodging.—Board and lodging will be furnished by the University at a cost of sixty dollars ($60.00) for the first semester, not including the Christmas vacation, and sixty-four and a half dollars ($64.50) for the second semester. These sums must be paid at the beginning of each semester. Under no circumstances, except on account of sickness, will any part of these charges be refunded because of absence for a period of less than one month; and in case a student is dismissed from the University, no part will be refunded. In very exceptional cases, arrangements may be made to pay as follows: Twenty dollars on September 22, October 31, and on December 7; $24.50 on January 29; and $20.00 on March 14 and on April 14. Under *Board and Lodging* are included meals in the dining-hall and room (with heat, light and access to a bathroom), furnished as stated below. The doors of the rooms are provided with Yale locks. A deposit of 25 cents is required for each key, which will be returned when the key is surrendered.

Lodging without Board.—Students occupying a room in the dormitories, but not taking meals in the dining-hall, will be charged $5.00 per month for lodging.

Board without Lodging.—Board without lodging will be furnished at the rate of $13.50 per calendar month, payable in advance. No part of this sum will be refunded.

Furniture.—All rooms are partially furnished. The furniture consists of two iron bedsteads and mattresses, chiffonier or bureau, table, washstand, and chairs. The students are required to provide all other articles, including pillows, bedding, wash-bowl, pitcher, mirror, half curtains, mosquito-bar, etc.

Uniform.—Students in the military department are required to provide themselves with the prescribed uniform, which is furnished under contract. The suit is of Charlottesville cadet gray, of good quality, and inexpensive. A cap of dark blue cloth and two pairs of white duck trousers are also required. This uniform is neat and serviceable and may be worn at all times. The total cost is about $17.00.

Books.—The cost of books depends largely upon the course taken. The cost of required text-books is, in no case, a large item of expense, though in the higher classes the student is encouraged to acquire a few works of permanent value.

Summary.—The following statement summarizes the minimum expenses of a Florida student registered in the College of Arts and Sciences, of Agriculture, or of Engineering, or in the Teachers College:

Tuition	$000.00
Registration Fee	5.00
Damage Deposit	5.00
Infirmary Fee	3.00
Board and Lodging	124.50
Uniform (about)	17.00
Books (about)	10.00
Incidentals (laundry, athletic, literary society, etc., dues), about	20.00
	184.50
Less Damage Deposit returned at end of year	5.00
	$179.50

The actual University charges to a law student (including board and lodging, fees, and tuition, but not including books or damage deposit) are $172.50.

Graduate and other students who are exempt from buying uniforms, will deduct the cost of uniform from the above table; and students from other States will add a tuition fee of $20.00.

Remittances.—*All remittances should be made to the Auditor, The University of Florida, Gainesville, Fla.*

Fellowships.—Three Teaching Fellowships, established in order to encourage young teachers to prepare themselves further for their work by taking graduate courses in Education, are offered in the Teachers College. Each fellowship pays two hundred dollars ($200.00) annually.

Application for a fellowship must be made in writing and addressed to the Dean of the Teachers College or to the President of the University. It must show that the applicant is a college graduate and that he has ability to profit by the work offered. Testimonials of good character must accompany the application.

The holder of a fellowship must devote himself to the prosecution of studies leading to the Master's degree in Education. He will be expected to teach four or five hours per week in

the Practice High School, under the direction and supervision of the Teachers College. (He must devote much effort and time to this teaching, since it will count as two hours toward the degree.) He may be called upon for other minor services, such as conducting examinations and teaching review classes, but he shall not be called upon to do anything that would interfere with his regular graduate work.

SCHOLARSHIPS.—Through the generosity of friends of the University the institution is able to offer needy and deserving young men the following scholarships:

Two of $100.00 each per year:

1. *The Board of Control Scholarship.*—Established and maintained by the Board of Control. For Florida students.

2. *The Kirby Smith Scholarship.*—Established and maintained by the Kirby Smith Chapter of the Daughters of the Confederacy. For grandsons of Confederate veterans.

Three of $124.50 each per year:

3. *The Children of the Confederacy Scholarship.*—Established and maintained by the Florida branch of the Children of the Confederacy. For the lineal descendant of a Confederate soldier.

4 and 5. *The United Daughters of the Confederacy Scholarships.*—Established and maintained by the United Daughters of the Confederacy of the State at large. For lineal descendants of Confederate veterans.

Two of $200 per year:

6. *The Southern Railway Scholarship; William Wilson Finley Foundation.*—Maintained by the Southern Railway Company as a memorial to the late President Finley, and in recognition of his interest in agricultural education. Tenable for four years. For a resident of any county through which the G. S. and F. R. R. runs. The recipient must enter the College of Agriculture.

Further particulars relating to this scholarship may be obtained from Mr. M. V. Richards, Industrial Agent, Southern Railway, Washington, D. C., or from Dean J. J. Vernon, College of Agriculture, University of Florida, Gainesville, Florida.

7. *The Knight and Wall Scholarship.*—Established and maintained by the Knight and Wall Company, hardware dealers, of Tampa. Tenable for four years.

Further particulars relating to this scholarship may be ob-

tained from the Superintendent of Public Instruction, Hillsboro County, Tampa, Florida.

Application for a scholarship should be made to the President of the University, and should be accompanied by a record of the student's work and statement of his need, and testimonials as to his character. The scholarships will be awarded according to the following principles:

(*a*) The student must actually need this financial help to enable him to attend the University.

(*b*) He must be worthy to receive such help. To be worthy he must first be a young man of good character and habits; second, he must be sufficiently far advanced to enter not lower than the Freshman Class of the University.

Opportunities for Earning Expenses.—It is often possible for a student to earn a part of his expenses by working during such hours as are not required for his University duties.

The University gives regular employment to a few students as waiters in the dining-hall, as janitors, and in some other capacities. Such employment is not, as a rule, given to a student unless he is financially unable to complete a year at the University without earning money. In making appointments preference is given to students in attendance at the University, as compared with applicants from outside; to members of higher classes, as compared with those of lower classes; to students of high standing as compared with those of low standing; and to students from Florida as compared with those from elsewhere. Employment is not given to a student who fails in any study.

While the employment of students is designed to assist those in need of funds, the payment for their services is in no sense a charity. The rate of remuneration is no higher, and the standard of service demanded is no lower, than would be the case if the work were done by others than students. If a student employee fails to give satisfaction, he is promptly discharged. Otherwise he is continued in his position as long as he cares to hold it, provided it is not found to interfere with reasonable success in his studies, and provided he does not commit any breach of good conduct.

While great credit is due those who are willing to make the necessary sacrifices, students are not advised to undertake to earn money while pursuing their studies, unless such a course of ac-

tion is unavoidable. Proper attention to studies makes sufficient demand upon the time and energy of a student, without the burden of outside duties; and such time as the studies leave free can be spent more profitably in healthful recreation.

ALUMNI ASSOCIATION

At the close of the commencement exercises in 1906 the graduates of the year organized an Alumni Association. All graduates of the University *and the graduates of the former institutions who have had their diplomas confirmed by the University* are eligible for membership. An "Alumni Bulletin" containing a list of the Alumni, their present addresses, and other information concerning them is now being prepared and will shortly be published.

Further information concerning the Association may be had by addressing any one of the officers: President, B. R. Colson, Gainesville, Fla.; Vice-President, N. S. Storter, Punta Gorda, Fla.; Secretary and Treasurer, J. W. Blanding, Gainesville, Fla.

STUDENT ORGANIZATIONS AND PUBLICATIONS

The Young Men's Christian Association.—There is a branch of the Y. M. C. A. in the University, which meets every Sunday. At these meetings the practical rather than the theoretical phases of Christianity are freely and candidly talked over, and the students discuss among themselves the special problems which arise in student life. Members of the Faculty, the ministers of the city, and distinguished Christian workers are frequently invited to address the association. Bible classes are organized in connection with the work.

Students, on entering the University, should by all means become identified with this organization, and parents should counsel and encourage them to do so. A note of introduction to the president of the organization will cause especial attention to be given a new student.

Literary Societies.—The *Literary Societies* are valuable adjuncts to the educational work of the University. They are conducted entirely by the students and maintain a high level of endeavor. The members obtain much practical experience in the conduct of public assemblies. They assimilate knowledge of parliamentary law, acquire ease and grace of delivery, learn to

argue with calmness of thought and courtesy of manner, and are trained in thinking and in presenting their thought clearly and effectively while facing an audience. All students are earnestly advised to connect themselves with one of these societies, and to take a constant and active part in its work.

MARSHALL DEBATING SOCIETY.—See page 123.

TRANSIT CLUB.—This is an organization of the civil engineering students, having for its object the promotion of both their social and their intellectual interests. It was founded in the spring of 1909 as a natural result of the fraternal feeling brought about by the close comradeship of camp life, and is the pioneer engineering society in this State. Fortnightly meetings are held in the civil engineering classrooms, and each member in turn presents a paper on some topic of interest to civil engineers.

PEABODY CLUB.—This is an organization of students in the Teachers College and of others interested in teaching. It meets once a week to discuss modern educational problems, especially those that will confront the young teacher in his regular school work. It also brings out the advantages of holding teachers' meetings and conferences. Students who contemplate teaching are urged to become members and to take an active part in the work of this club.

AGRICULTURAL CLUB.—The purpose of the Agricultural Club is to promote interest in agriculture; to unify college thought; to afford training in public speaking; and to prepare for leadership in after life. The club meets weekly. Its membership is composed of students in the College of Agriculture and others interested.

KELVIN ENGINEERING CLUB.—This is a society of electrical and mechanical engineering students. It meets once every two weeks for the discussion of topics of general interest in electrical and mechanical enginering.

GLEE AND MANDOLIN CLUBS.—These organizations add greatly to the pleasures of University life. During the past year they rendered the religious exercises at the morning assemblies much more attractive. Several week-end trips to places in the vicinity of Gainesville and one longer trip were taken. Under the direction of Mr. J. Oscar Miller and with the assistance of Dr. J. M. Chapman as "Reader," they delighted large audiences

wherever they appeared. It is an advantage to every musically inclined student to join one or the other of these clubs, both on account of the training he receives and of the pleasure he derives himself and gives others.

PUBLICATIONS.—Beginning with the session of 1909-10 each Senior class has published an annual, known as the *"Seminole,"* in which appears an account of the college year as seen by the Seniors. The annual is profusely and handsomely illustrated.

The *"Florida Alligator"* is a weekly newspaper owned and controlled by the student-body. In it are recorded the local happenings of interest to the students. Its editorial articles discuss University problems from the viewpoint of the undergraduates. It seeks the support of all the alumni, who will find in it the best means of keeping in close touch with the University. The *"Alligator"* has been very successful during the two years of its existence.

ADMISSION

TERMS.—A candidate for admission must present, along with his scholastic record, a certificate of good moral character; and if he be from another college or university, the certificate must show that he was honorably discharged. No candidate under 16 (19 in the College of Law) years of age will be admitted.

METHODS.—There are two methods of gaining admission to the University:

(1) *By Certificate.*—The University will accept certificates from the approved senior high schools of Florida; from accredited academies and preparatory schools of the State; from any secondary school of another State which is accredited by its State University; and from any recognized college or university.

The certificate presented by the candidate for admission must be officially signed by the principal of the school attended. It must state in detail the work of preparation, and, in the case of Florida high schools, that the course *through the twelfth grade* has been satisfactorily completed.

Blank certificates, conveniently arranged for the desired data, will be sent to all high school principals and, upon application, to prospective students.

(2) *By Examination.*—Candidates not admitted by certificate will be required to stand written examinations upon the en-

trance subjects. For dates of these examinations, see University Calendar, page 6.

REQUIREMENTS.—*"Entrance Units."*—The requirements for admission are measured in "Entrance Units," based upon the curriculum of the high schools of Florida. A unit represents a course of study pursued throughout the school year with five recitation periods of at least forty-five minutes each per week, four courses being taken during each of the four years. Thus the curriculum of the standard senior high school of Florida is equivalent to sixteen units. Two laboratory periods should be counted as one recitation period.

Number of Units.—Admission to the Freshman class of the University will be granted to candidates who present properly certified credentials, showing that they have been graduated from a standard senior high school with a full four-year curriculum based upon an eight-year grammar school course, or who present satisfactory evidence of having completed courses amounting to sixteen units of preparatory work.

These requirements are at the very least equal to fourteen and one-half units as defined by the Carnegie Foundation or the National Educational Association.

Distribution of Units.—Of the *sixteen* units required for admission, *ten* (*eight* in the College of Law) are specified and *six* (*eight* in the College of Law) are elective. Eight of the specified units are required in common by all the colleges of the University while the remaining two vary.

UNIVERSITY REQUIREMENT

English	3 units
Mathematics	3 units
History	1 unit
Science	1 unit

COLLEGE OF ARTS AND SCIENCES
TEACHERS COLLEGE

A. B. Curriculum

Latin	2 units

B. S. Curriculum

One Foreign Language or History and Science	2 units

COLLEGE OF AGRICULTURE

Agriculture	1 unit
History or Science	1 unit

COLLEGE OF ENGINEERING

Mathematics	1 unit
History or Science	1 unit

Elective Units.—The elective units may be chosen from the list of elective subjects given below and from such other subjects as are regularly taught in a standard high school. It is provided, however, that not more than four of these units may be accepted in vocational subjects, such as typewriting, stenography, mechanic arts, agriculture, etc.

LIST OF ELECTIVE SUBJECTS

Agriculture	1 unit
Botany	½ or 1 unit
Chemistry	1 unit
*Engineering Practice	4 units
English	1 unit
Latin	4 units
History	2 units
Mathematics	1 unit
Modern Languages—French, German, or Spanish	2 units
Physical Geography	1 unit
Physics	1 unit
Zoology	½ or 1 unit

Deficiencies.—A deficiency of two units will be allowed a candidate, but such deficiency must be removed by the end of the first year of admission.

DESCRIPTION OF UNIT COURSES

ENGLISH.—Four units.—The required work in English (including Grammar, Composition and Rhetoric, and the recommended Classics) is designed to cover three years. It is urged that the exercises in Composition and the use of the Classics be continued throughout this time. No candidate will be accepted in English whose work is notably defective in spelling, punctuation, idiom, or division into paragraphs.

(1) *Grammar.*—A thorough knowledge of English Grammar

*Only for admission to the College of Engineering.

both in its technical aspects and in its bearings upon speech and writing.

(2) *Composition and Rhetoric.*—A mastery of the fundamental principles of elementary Rhetoric, such as is given in any standard high school text; and constant practice in Composition, oral and written, during the whole period of preparation.

(3) *Classics.*—The English Classics now generally adopted by schools and colleges. There are two divisions of this work:

I. Reading.—A certain number of books will be assigned for reading (see list subjoined). The form of examination will usually be the writing of a paragraph or two on each of several topics to be chosen by the candidate from a considerable number —perhaps ten or fifteen—set before him in the examination paper. The treatment of these topics is designed to test the candidate's power of clear and accurate expression, and will call for only a general knowledge of the substance of the books. The candidate must also be prepared to answer simple questions on the lives of the authors.

II. Study and Practice.—This part of the examination presupposes the thorough study of each of the works named in this division. The examination will be upon the subject matter, form, and structure. In addition the candidate may be required to answer questions involving the essentials of English Grammar and the leading facts in the periods of English literary history to which the prescribed texts belong.

READING.—With a view to large freedom of choice, the books prescribed for reading are arranged in the following groups, from which at least ten units are to be selected, two from each group:

1. The Old Testament, comprising at least the chief narrative episodes in Genesis, Exodus, Joshua, Judges, Samuel, Kings, and Daniel, together with the books of Ruth and Esther. The Odyssey, with the omission, if desired, of Books I, II, III, IV, V, XV, XVI, XVII. The Iliad, with the omission, if desired, of Books XI, XIII, XIV, XV, XVII, XXI. Virgil's Æneid. The Odyssey, Iliad and Æneid should be read in English translations of recognized literary excellence.

For any unit of Group I a unit from any other group may be substituted.

II. Merchant of Venice. Midsummer Night's Dream. As You Like It. Twelfth Night. Henry the Fifth. Julius Cæsar.

III. Defoe: Robinson Crusoe, Part 1. Goldsmith: Vicar of Wakefield. Either Scott's Ivanhoe or Quentin Durward. Haw-

thorne: House of the Seven Gables. Either Dicken's David Copperfield or Tale of Two Cities. Thackeray: Henry Esmond. Mrs. Gaskell: Cranford. George Eliot: Silas Marner. Stevenson: Treasure Island.

IV. Bunyan: Pilgrim's Progress, Part 1. The Sir Roger de Coverley Papers in the *Spectator*. Franklin: Autobiography (condensed). Irving: Sketch Book. Macaulay: Essays on Lord Clive and Warren Hastings. Thackeray: English Humorists. Selections from Lincoln, including at least the two Inaugurals, the Speeches in Independence Hall and at Gettysburg, the Last Public Address, and Letter to Horace Greeley, along with a brief memoir or estimate. Parkman: Oregon Trail. Either Thoreau's Walden or Huxley's Autobiography and selections from Lay Sermons, including the addresses on Improving Natural Knowledge, A Liberal Education, and A Piece of Chalk. Stevenson: Inland Voyage and Travels with a Donkey.

V. Palgrave: Golden Treasury (First Series), Books II and III, with especial attention to Dryden, Collins, Gray, Cowper, and Burns. Gray's Elegy in a Country Churchyard and Goldsmith's Deserted Village. Coleridge's Ancient Mariner and Lowell's Vision of Sir Launfal. Scott: Lady of the Lake. Byron: Childe Harold, Canto IV, and The Prisoner of Chillon. Palgrave: Golden Treasury (First Series), Book IV, with especial attention to Wordsworth, Keats, and Shelley. Poe's Raven. Longfellow's Courtship of Miles Standish, and Whittier's Snow-Bound. Macaulay's Lays of Ancient Rome and Arnold's Sohrab and Rustum. Tennyson: Gareth and Lynette; Lancelot and Elaine; and The Passing of Arthur. Browning: Cavalier Tunes; The Lost Leader; How They Brought the Goods News from Ghent to Aix; Home Thoughts from Abroad; Home Thoughts from the Sea; Incident of the French Camp; Hervé Riel; Pheidippides; My Last Duchess; Up at a Villa—Down in the City.

STUDY.—Shakespeare: Macbeth. Milton: L'Allegro; Il Penseroso; Comus. Either Burke's Speech on Conciliation with America or both Washington's Farewell Address and Webster's First Bunker Hill Oration. Either Macaulay's Life of Johnson or Carlyle's Essay on Burns.

(4) *History of American Literature; History of English Literature.*—One unit, elective.—The fourth year of the high school course in English usually covers the above subjects.

MATHEMATICS.—Four units.

(1) *Algebra—First Year.*—One unit.—A thorough knowledge of the elementary operations, factoring, highest common factor, least common multiple, fractions, simple equations, inequalities, involution, evolution, and numerical quadratics. This is supposed to represent the work of one year in the high school.

(2) *Algebra—Second Year.*—One unit*.—A thorough study of quadratic equations, ratio and proportion, the progressions, imaginary quantities, the binomial theorem, logarithms, and graphic algebra. This is supposed to represent the work of the second year in algebra in the high school.

(3) *Geometry.*—One unit.—Plane Geometry is required.

(4) *Solid Geometry.*—One-half unit.

(5) *Plane Trigonometry.*—One-half unit.

HISTORY.—Four units.

(1) Ancient History, with particular reference to Greece and Rome.....1 unit
(2) European History since Charlemagne.....1 unit
(3) English History .....1 unit
(4) American History .....1 unit

A year's work based on a good textbook of at least 300 or 400 pages is required in the case of each of the above divisions. The student should always know something of the author of the textbook he used and give evidence of having consulted some works in addition to the one studied.

LATIN.—Four units.—At least four years' work in this study is required to cover the four units. The minimum for each year is as follows:

(1) *First Year.*—One unit.—A first year Latin book, such as Collar & Daniell's First Year Latin or Potter's Elementary Latin Course.

(2) *Second Year.*—One unit.—Four books of Cæsar's Gallic War, with constant study of the grammar and constant practice in prose composition.

(3) *Third Year.*—One unit.—Six of Cicero's Orations, with grammar and prose composition throughout the year.

(4) *Fourth Year.*—One unit.—The first six books of the Æneid and as much prosody as relates to accent, versification in general and dactylic Hexameter.

MODERN LANGUAGES.—Two units.—Both units in a modern language should be offered; if only one is offered, the student will be required to pursue the subject a second year in the University.

French.—First Year.—One unit.—(1) Careful drill in pronunciation; (2) the rudiments of grammar, including the element-

*This course represents only one-half unit on the Carnegie unit scale.

ary rules of syntax; (3) abundant easy exercises; (4) the reading of from 100 to 175 duodecimo pages of graduated texts, with constant practice in translating into French easy variations of the sentences read (the teacher giving the English) and in reproducing from memory sentences previously read; (5) writing French from dictation.

French.—Second Year.—One unit.—(1) The reading of from 250 to 400 pages of easy modern prose; (2) constant practice in translating into French easy variations upon the texts read; (3) frequent abstracts, sometimes oral and sometimes written, of portions of the text already read; (4) writing French from dictation; (5) continued drill upon the rudiments of grammar, including forms and syntax, with constant application in the construction of sentences; (6) memorizing of short poems.

German.—First Year.—One unit.—(1) Careful drill upon pronunciation; (2) the memorizing and frequent repetition of easy colloquial sentences; (3) drill upon the rudiments of grammar, including the elementary rules of syntax and word-order; (4) abundant easy exercises; (5) the reading of from 75 to 100 pages of graduated texts, with constant practice in translating into German easy variations upon sentences selected from the reading-lesson (the teacher giving the English), and in the reproduction from memory of sentences previously read.

German.—Second Year.—One unit.—(1) The reading of from 150 to 200 pages of easy stories and plays; (2) practice in the translation into German of easy variations upon the matter read and also in the off-hand reproduction, sometimes orally and sometimes in writing, of the substance of short and easy selected passages; (3) continued drill upon the grammar; (4) memorizing of short poems.

Spanish.—Requirements similar to those for French, which see.

Agriculture.—One unit.—Study of Agriculture for Southern Schools, by Duggar, and The Nursery-Book, by Bailey, or their equivalents. At least one-third of the time should be devoted to laboratory practice, field work, and visits to successfully and unsuccessfully conducted farms and fruit plantations.

Physical Geography.—One unit.—Study of a modern textbook, together with laboratory and field course, covering the following subjects: (1) The earth as a globe; shape of the earth,

how proved; size, how measured; motions, how determined; map making; different modes of projection. (2) The ocean; forms and divisions; depth, density, temperature; ocean movements, waves and currents; character of ocean floor; life in ocean; tides, character and causes; shore lines. (3) The atmosphere; chemical composition, and how determined; pressure of, and how determined; circulation of, character and cause; storms, classification of, and cause. (4) Land, amount and distribution of; topographic charts; plains and plateaus, kinds of, and development of; volcanoes, distribution and character of; rivers, life-history of; glaciers, kinds and characteristics of.

Botany.—One-half or one unit.—Anatomy and morphology; physiology; ecology; the natural history of the plant groups, and classification. Individual laboratory work by the student should receive at least double the amount of time devoted to recitation.

Zoology.—One-half or one unit.—Zoology as given in a standard high school text, and, in addition to the theoretical work, dissection of at least ten specimens. Note-books with drawings showing the character of the work completed must be presented on entrance to the University.

Physics.—One unit.—Study of a standard high school text; experimental work consisting of lecture-table demonstrations and individual laboratory work. The latter should comprise at least thirty exercises from a good laboratory manual.

Chemistry.—One unit.—Individual laboratory work, comprising at least thirty exercises from a recognized manual; instruction by lecture-table demonstration; study of a standard text-book.

ADVANCED STANDING

Advanced standing will be granted only upon recommendation of the heads of the departments concerned. Fitness for advanced work may be determined by examination or by trial. Students from other colleges or universities of like standing will ordinarily be classified according to the ground already covered.

SPECIAL STUDENTS

Provision is made for students desiring to take special courses. (See page 29.)

ORGANIZATION

The University adopted in 1910 the organization and nomenclature recommended by the National Association of State Universities. In accordance with this the following divisions of the work of the institution have been made:

I. The Graduate School.

II. The College of Arts and Sciences:
- (a) A Curriculum leading to the A.B. degree.
- (b) A Curriculum leading to the B.S. degree.

III. The College of Agriculture:

A Curriculum leading to the degree of B.S. in Agriculture.

IV. The College of Engineering:
- (a) A Curriculum leading to the B.S. degree in Civil Engineering.
- (b) A Curriculum leading to the B.S. degree in Electrical Engineering.
- (c) A Curriculum leading to the B.S. degree in Mechanical Engineering.

V. The College of Law:

A Curriculum leading to the degree of LL.B.

VI. The Teachers College and Normal School:
- (a) A Curriculum leading to the A.B. degree in Education.
- (b) A Curriculum leading to the B.S. degree in Education.
- (c) A Normal Course leading to a Diploma.
- (d) The University Summer School.

VII. The Division of University Extension:
- (a) Institutes.
- (b) Farmers' Co-operative Demonstration Work.
- (c) Boys' and Girls' Clubs.

VIII. The Agricultural Experiment Station.

IX. State Nursery Stock Inspection.

GRADUATE SCHOOL

Organization.—The work in this school is under the direction of the Committee on Graduate Work, which consists of Professors Anderson, Vernon, Benton, and Thackston.

Degrees Offered.—The University is not in a position at present to lay any great stress upon the graduate work. Its courses are mainly of a college grade and will doubtless remain so for a good many years to come. For the benefit, however, of those who wish to carry their studies further, courses are offered leading to the degrees of Master of Arts, Master of Arts in Education, Master of Science, Master of Science in Agriculture, and Master of Science in Education.

Prerequisite Degrees.—Candidates for the Master's degree must possess the corresponding Bachelor's degree of this institution or of one of like standing.

Applications.—Candidates for the Master's degree must present to the Chairman of the Committee on Graduate Work a written application for the degree not later than the first of November in the year in which the degree is desired. This application must name the major and minor subjects offered for the degree and must contain the signed approval of the heads of the departments concerned.

Time Required.—The student must spend at least one entire academic year in residence at the University of Florida as a graduate student, devoting his full time to the pursuit of these studies.

Work Required.—The work is twelve hours per week. Six hours of this work must be in one subject (the major) and of a higher grade than any course offered for undergraduate students in that subject. The other six hours (the minor or minors) are to be determined and distributed by the professor in charge of the department in which the major subject is selected. It is understood, however, that no course designed primarily for students of a lower grade than the Junior Class will be acceptable as a minor. It is also to be understood that while the major course is six hours, these hours are not the same as in undergraduate work. It means that the professor has the privilege of using these six

hours for recitations or examinations, but the student will find that considerably more time is required to prepare for one of these recitations than is the case in an undergraduate course. To obtain credit for a minor the student must attain a grade of not less than eighty per cent.

DISSERTATION.—It is customary to require a dissertation showing original research and independent thinking on some subject accepted by the professor under whom the major work is taken, but this requirement may be waived at the option of the professor, subject to the approval of the Committee on Graduate Work. If the requirement be not waived, the dissertation must be in the hands of the committee not later than two weeks before Commencement day.

COLLEGE OF ARTS AND SCIENCES

FACULTY

ALBERT A. MURPHREE, A.M., LL.D.,
President.

JAS. N. ANDERSON, M.A., Ph.D.,
Dean of the College of Arts and Sciences.
Professor of Ancient Languages.

JAS. M. FARR, A.M., Ph.D.,
Professor of English Language and Literature.

EDWARD R. FLINT, Ph.D., M.D.,
Professor of Chemistry.

J. R. BENTON, A.B., Ph.D.,
Professor of Physics.

C. L. CROW, M.A., Ph.D.,
Professor of Modern Languages.

H. S. DAVIS, Ph.D.,
Professor of Geology, Zoology and Bacteriology.

H. G. KEPPEL, A.B., Ph.D.,
Professor of Mathematics and Astronomy.

MAJOR E. S. WALKER, U.S.A., Retired.
Professor of Military Science.

W. L. FLOYD, M.S.,
Professor of Botany.

HARVEY W. COX., A.M., Ph.D.,
Professor of Philosophy.

LUTHER LEE BERNARD, A.B., Ph.D.,
Professor of History and Economics.

W. S. PERRY, A.B.,
Instructor in Physics.

IRA D. ODLE, B.S.,
Instructor in Botany and Bacteriology.

GENERAL STATEMENT

Aim and Scope.—The tendency of universities at the present time seems to be to reach out their arms farther and farther into the domain of knowledge and to become more and more places where the student may expect to be able to acquire any form of useful knowledge in which he may be interested. In the center, however, there is still found the College of Arts and Sciences, the pulsating heart, as it were, sending its vivifying streams to the outermost tips of the institution.

The aim of this college is to prepare for life, it is true, but not so directly and immediately as do the professional schools. It is a longer, but a better road, for those who are able to travel it, to distinction and ultimate success in almost any calling. Especially in the case of the learned professions, it is becoming clearer that a man should first get a liberal education, if possible, before entering upon his professional studies.

The purpose and aim of the College of Arts and Sciences is to impart culture and refinement, to train the mind and strengthen the intellect, to build up ideals and establish the character, to enlarge the vision, to ennoble the thoughts, to increase the appreciation of the beautiful and the true, to add charm to life and piquancy to companionship, to make the man a decent fellow, a useful citizen, an influential member of society in whatever community he may be thrown, in whatever field his life-course may be run.

But if the student wishes to examine the practical side exclusively, he will find that there is also something practical in all these courses. For instance, they are all valuable for him who wishes to learn to teach those subjects. Moreover, the use of electives gives the student an opportunity to specialize in some branch according to his inclination and in furtherance of his plans.

Admission.—For full description of requirements for admission and of unit courses, see pages 39 to 46, inclusive.

Literary Societies.—See page 37.

Degrees.—The College of Arts and Sciences offers courses leading to the degrees of Bachelor of Arts (A. B.), and Bachelor of Science (B.S.).

Subjects of Study.—The subjects of study leading towards

the degrees offered by the College of Arts and Sciences are divided into the following four groups:

I.	*II.*	*III.*	*IV.*
Military Science, I and II,	French, German, Greek, Latin, Rhetoric and English Language, Spanish.	Bible, Economics, Education, English, History, Philosophy, Political Science, Psychology, Sociology.	Agriculture, Astronomy, Bacteriology, Biology, Botany, Chemistry, Drawing, Descriptive Geometry, Geology, Mathematics, Mechanics, Military Science III, Physics, Physiology, Surveying, Zoology.

REQUIREMENTS FOR DEGREES.—For each of the degrees offered, A.B. and B.S., a total of sixty-two hours must be taken, of which two must be in Group I.

For the A.B. degree it is further provided that fifteen hours must be taken in each of Groups II and III and twelve hours from Group IV; three hours may be chosen from any group; and the remaining fifteen hours (including the "major"*) must be chosen from Groups II, III and (pure) Mathematics.

For the degree of B.S. twelve hours must be taken from each of Groups II and III, twenty-four (including the "major"*) from Group IV, leaving twelve hours to be chosen from the subjects mentioned above.

*For definition, see page 54.

CURRICULUM

Leading to the Degree of Bachelor of Arts

Freshman Year

NAMES OF COURSES	NATURE OF WORK	HOURS PER WEEK
English I	Rhetoric	3
French I or German I or Spanish I or Greek I or Latin I	Elementary Course Elementary Course Elementary Course Elementary Course Livy, Ovid, Terence	3
History I	Modern European History	3
Mathematics I	Plane Analytic Geometry, College Algebra	3
Military Science I	Regulations	1
Elective		3
		16

Sophomore Year

Group II		3
Group III		3
Group IV		3
Military Science II		1
Group II or III or in both		6
		16

CURRICULUM

Leading to the Degree of Bachelor of Science

Freshman Year

NAMES OF COURSES	NATURE OF WORK	HOURS PER WEEK
English I	Rhetoric	3
Botany I	General Botany	3
French I or German I or Spanish I or Greek I or Latin I	Elementary Course Elementary Course Elementary Course Elementary Course Livy, Ovid, Terence	3
Mathematics I	Plane Analytic Geometry, College Algebra	3
Military Science I	Regulations	1
Elective		3
		16

Sophomore Year

Group II		3
Group III		3
Group IV		9
Military Science II		1
		16

In the Junior and Senior years candidates for either of the degrees offered must choose their studies so as to conform to the general "Requirements for Degrees" of this college. The major referred to in these requirements must consist of nine hours in one department and must be approved by the head of the department chosen.

In all years the choice of electives must meet with the approval of the dean.

REQUIREMENTS FOR DEGREES FOR STUDENTS ADMITTED BEFORE SESSION 1913-14.—The regulations printed above went into effect with the school year of 1913-14. Students previously admitted to the College of Arts and Sciences will be held to the requirements for degrees in force when they entered.

DEPARTMENTS OF INSTRUCTION

ANCIENT LANGUAGES

Professor Anderson

The study of the classics contributes largely to general culture. In addition to the recognized and peculiar disciplinary value of such studies, and their conspicuous service in cultivating the literary sense and developing literary taste, they have a more immediate value and office as aids to the comprehension and interpretation of modern languages and literature. A thorough study and a full understanding of the modern languages, especially the Romance Languages and our own tongue, demand a considerable preliminary acquaintance with Latin and Greek. Thus from two points of view, that of their own intrinsic beauty and value as culture studies, and that of subsidiary aids to the study of other and modern languages, Latin and Greek command our attention, and call for a large place in any curriculum which proposes to issue in a liberal education.

The following courses are offered for the coming year:

LATIN

LATIN I.—Ovid, about 2,000 verses selected from his various works, but mainly from the Metamorphoses; Versification, with especial reference to the Dactylic Hexameter and Pentameter; Livy, selections, amounting to about two books; Terence, Phormio. (3 *hours.*)

LATIN II.—Selections from the Letters of Cicero and Pliny; selections from the Satires, Epistles, Odes, and Epodes of Horace, with a study of the Horatian Metres. (3 *hours.*)

LATIN III.—Juvenal's Satires, with some omissions; Tacitus, parts of the Histories or Annals; selections from Catullus, Tibullus, Propertius, and Ovid. (3 *hours.*)

LATIN IV.—Several plays of Plautus and Terence; Tacitus, Germania and Agricola; selections from Seneca, Gellius, and Quintilian. (3 *hours.*)

LATIN V*b*.—History of the Roman Literature, preceded by a short study of Roman Life and Customs. (*Second semester;* 3 *hours.*)

LATIN VI.—Grammar and Prose Composition: an intermediate course in Prose Composition adapted to the needs of students taking Latin I or Latin II and consisting of weekly written exercises and some oral work; in connection with this there will be a general review of Latin Grammar with some more advanced work, both in forms and syntax. (*2 hours.*)

GREEK

GREEK I.—The forms and most important principles of the syntax; numerous exercises, partly oral, partly written, and some practice in conversation and sight-reading. One book of Xenophon's Anabasis, with exercises in Prose Composition and study of the Grammar. (*3 hours.*)

GREEK II.—Xenophon's Anabasis, Books II, III and IV; selections from Lucian and the easier dialogues of Plato; sight translation; Prose Composition; Grammar. (*3 hours.*)

GREEK III.—Select orations of Lysias or other Attic orators, with informal talks on Athenian laws and customs; parts of the Iliad and Odyssey of Homer; Prosody. (*3 hours.*)

GREEK IV.—Selections from the Greek historians, especially Herodotus and Thucydides; selections from the Greek dramatists, especially Euripides and Sophocles; selections from the lyric fragments of Alcaeus, Sappho, etc. (*3 hours.*)

GREEK V*a*.—A study of the history of Greek Literature, preceded by a short study of Greek Life and Customs. A knowledge of the Greek language is highly desirable, but is not required for this course. (*First semester;* 3 *hours.*)

GREEK VI.—Grammar and Prose Composition; an intermediate course in Prose Composition adapted to the needs of students taking Greek III or Greek IV and consisting of weekly written exercises and some oral work; in connection with this there will be a general review of Greek Grammar with some more advanced work, both in forms and syntax. (*2 hours.*)

GREEK VII.—Selections from the Septuagint and from the New Testament; class and parallel translations; vocabulary, grammar, and stylistic features stressed. (*3 hours.*)

BIBLICAL INSTRUCTION

Professor Buchholz

The following courses are offered to Juniors and Seniors, embracing such aspects of Biblical study as the University is pre-

pared to give, with a view to providing a major subject in the Bachelor of Arts curriculum which will allow students who desire to begin preparation in the University for such work as Secretary or Physical Director of the Young Men's Christian Association, for welfare work in mills or social settlements, or for the ministry, to specialize in this direction. The courses offered will be conducted by the instructors in the departments under which the various aspects of the subject naturally fall and will be given in a spirit free from any narrow sectarianism.

BIBLE I*a*.—*Old Testament History.*—In the first semester the student will be made familiar with the history of the Israelitish nation as narrated in the historical books of the Old Testament; the connections between sacred and profane history will be discussed; and some conception of the development of the cultural life of the nation will be gained.

BIBLE I*b*.—*New Testament History.*—In the second semester the student will use as a text primarily the New Testament itself. A thorough knowledge of the story of the life of Christ and the development of the early church under the ministry of the Apostles will be the main end in view. A correlation of this with world history, and lectures on wider reaches of the subject will be attempted. (3 *hours. Professor Buchholz.*)

BIBLE II.—*The English Bible as Literature.*—In this course the various literary types found in the Bible will be studied and the excellence of the work as compared with other great examples of literature will be discussed. The diction of the 1611 version will be compared with that of earlier and more recent translations, and its effect upon English literature will be demonstrated. (3 *hours. Professor Farr.*)

BIBLE III.—*Old and New Testament Greek.*— See Greek VII. (3 *hours. Professor Anderson.*)

BIBLE IV.—*The Bible as an Ethical and Religious Guide.*—The time allotted to this course will be spent in the consideration of the Bible as a guide for human conduct. Those parts of the Old and the New Testaments which bring out most vividly and directly the moral and religious elements will receive most attention. The course will aim to give to each student that appreciation of the Bible which all men should have. Lectures, Bible readings, studies of great sermons, and a text on Evidences of Christianity suggest in a general way how the course will be conducted. (3 *hours. Professor Cox.*)

BIOLOGY AND GEOLOGY

For a description of the laboratories of this department, see pages 23 and 24; for its geological and other collections, see also under Museum, page 21.

ZOOLOGY

Professor Davis

Zoology I.—*General Zoology.*—Typical examples illustrating the various groups of the animal kingdom are studied, the object being to give the student a comprehensive idea of the structure, physiology, and activities of animals. (3 *hours.*)

Zoology II.—*Histology and Physiology.*—A study of the microscopic structure and physiology of the principal tissues and organs of both vertebrates and invertebrates, special attention being paid to mammals. Thorough training is given in the more important methods of investigation. (3 *hours.*)

Zoology III*b.*—*Entomology.*—Careful attention is given to the structure of insects in general, after which the insect orders are considered, the student being expected to recognize the various orders and the more common families. Emphasis is given to the economic side of entomology. (*Second semester;* 3 *hours.*)

Zoology IV*a.*—*Vertebrate Morphology.*—Recitations and lectures on the comparative anatomy of vertebrates, accompanied by laboratory work on representatives of the principal groups. (*First semester;* 5 *hours.*)

Zoology V*b.*—*Vertebrate Embryology.*—Recitations and lectures on the development of vertebrates with special reference to the chick. Laboratory work on the development of the chick. (*Second semester;* 5 *hours.*)

Zoology VI*b.*—*General Biological Problems.*—Lectures and collateral reading on such general biological problems as variation, adaptation, heredity, and organic evolution. Special attention is paid to the results of recent experimental work. (*Elective, subject to the permission of the instructor; second semester;* 3 *hours.*)

Zoology VII*a.*—*Physiology and Hygiene.*—Lectures and recitations on general physiology, hygiene and sanitation. (*First semester;* 3 *hours.*)

BACTERIOLOGY

Professor Davis and Mr. Odle

BACTERIOLOGY I*a*.—*General Bacteriology*.—A general introduction to bacteriology designed to afford the student a comprehensive knowledge of bacteria and their relation to every-day life. (*Prerequisite, Chemistry* I; *first semester;* 3 *hours.*)

BACTERIOLOGY II*b*.—*Agricultural Bacteriology*.—Special attention is given to the bacteria of soil and dairy products with some consideration of the bacterial diseases of animals and plants. (*Second semester;* 3 *hours.*)

BACTERIOLOGY III*b*.—*Advanced Bacteriology*.—Laboratory work with collateral reading along special lines adapted to the needs of the individual student. (*Second semester;* 3 *hours.*)

GEOLOGY

Professor Davis

GEOLOGY I.—*General Geology*.—A short course in dynamical, structural and historical geology. (3 *hours.*)

NOTE: At present it will not be possible to give during the same year all the courses offered in this department. The courses given each year will be determined by the demand. No course will be given to less than three students.

BOTANY

Professor Floyd and Mr. Odle

The department is well equipped for carrying on the work. It has large, well-lighted laboratories, a desciption of which will be found on page 22. Plants for study can be easily obtained at all seasons of the year. The flora of the vicinity is rich in the number of important species, and additional material may be secured from the horticultural grounds.

BOTANY I.—*General Botany*.—The study in the classroom and laboratory of the structure, morphology, evolution, and classification of plants. Work is done on special types, beginning with the simplest and advancing to the more complex. Field work is undertaken during the spring months. (3 *hours.*)

BOTANY II*a*.—*Plant Physiology*.—The life processes of plants, such as how water is taken up and disposed of, relation to the soil, nutrition, respiration, irritability, etc., are directly investigated. Much of this is done in the laboratory and garden. (*First semester;* 3 *hours.*)

BOTANY III*b*.—*Histology and Plant Anatomy*.—The structure and development of the tissues of the higher plants in relation to their function. Practice is given in fixing, staining and mounting microscopic slides. (*Second semester;* 3 *hours.*)

BOTANY IV*a*.—*Plant Pathology*.—The nature and causes of plant diseases, especially those due to parasitic fungi. Laboratory and field work is done on forms of greatest economic importance in the State. (*First semester;* 3 *hours.*)

BOTANY V*b*.—*Systematic Botany*.—The morphology and classification of the seed plants. The phylogeny of the different families is given special attention. (*Second semester;* 3 *hours.*)

BOTANY VI*b*.—*Plant Pathology* (*Advanced*).—Methods of culture and investigation of organisms causing plant diseases. This course is intended to prepare students for original investigation. (*Second semester;* 3 *hours.*)

CHEMISTRY

Professor Flint

The facilities for instruction in chemistry compare favorably with those of the larger institutions of the South and are being steadily improved. The department is equipped with the necessary apparatus and material for instruction in general inorganic and organic, analytical and industrial chemistry. See page 22.

A course in general inorganic chemistry is given the first year. The second year in chemistry is devoted mainly to qualitative, the third year to quantitative analysis. In the science courses, it is possible, on account of the electives offered, to get four years of chemistry, specializing in analytical work in the fourth year. Abundant laboratory work is offered in all of the courses.

CHEMISTRY I.—*General Inorganic Chemistry*.—During the first semester, the non-metallic elements are studied by means of a text-book, lectures and recitations. Special attention is given to the principles underlying chemical union, and to the theories and laws which govern the science. In the second semester the metals and their more important compounds are studied. (3 *hours.*)

CHEMISTRY II.—*Laboratory Course in General Chemistry*.—In order to impress the principles of the science upon the minds of the students, they are required to repeat in the laboratory many of the experiments seen in the lecture-room, taking notes of the same, and writing the chemical reactions as far as possible. Each

one is required to perform over a hundred experiments designed to illustrate chemical principles, including the preparation of many of the elements and their most important compounds. In the second semester the laboratory work is designed to study the reactions of the metals with a view to their classification. During this semester a portion of the time is devoted to a thorough course in dry analysis. (*Two exercises a week.*)

CHEMISTRY III.—*Laboratory Course in Qualitative Analysis.* —(*Three exercises a week.*)

CHEMISTRY IV.—Course III, with two additional exercises a week in the same line of work. (*Five exercises a week.*)

CHEMISTRY V.—*Organic Chemistry.*—Lectures, recitations and laboratory work. The laboratory work is designed to illustrate the various principles as given in the text, as well as practice in making pure organic preparations. (*Three hours.*)

CHEMISTRY VI.—*Chemical Technology.*—Consideration of the chemical principles involved in the manufacture, refining and preparation of the leading products of commercial importance. "Thorp's Outlines of Industrial Chemistry" is used as a text, lectures being given occasionally enlarging upon or explaining the subject-matter of the book. Among the subjects studied are fuels, sulphuric acid, the soda industry, the chlorine industry, fertilizers, cements, glass, pigments, coal tar, mineral oils, soap, starch, sugar, fermentation industries, explosives, textile industries, paper, leather. In connection with this visits will be made to such factories and chemical industries as may be accessible. (*Three hours.*)

CHEMISTRY VII.—*Quantitative Analysis.*—(*Elective in the Senior year to students in the B.S. Courses; 3 hours.*)

CHEMISTRY VIII.—In this course five exercises a week are devoted to laboratory work. During the first semester this is given to Quantitative Analysis, the exercises being selected with a view to familiarizing the students with the leading quantitative operations involved in the gravimetric, volumetric, and electrolytic methods in vogue. During the second semester the work of each individual is selected to aid especially in the line of work he may wish to pursue in the future, as medicine, pharmacy, analytical chemistry, etc. (*Seven hours.*)

CHEMISTRY IX*a or b.*—Lectures in Agricultural Chemistry, embracing the chemistry of soils, the atmosphere, plant and animal

growth and feeding, fertilizers, dairy products, insecticides, etc. (*Either semester; 3 hours.*)

ENGLISH LANGUAGE AND LITERATURE

Professor Farr

The work of this department is designed to meet the requirements for a practical and liberal education, and is regarded both as a necessary auxiliary to the training in technical courses, and as an important factor among the liberalizing studies. The three sides of the subject, Rhetoric, Linguistics, and Literature, are presented as fully as the time allotted will permit. While Rhetoric and Composition are especially stressed in the lower classes, literary studies in the higher, and linguistic work in electives, still the attempt is made to keep the three viewpoints before all classes as necessary to a mastery of their native language.

ENGLISH I.—*Advanced College Rhetoric.*—This course is designed to train the students in methods of clear and forceful expression. Throughout the year instruction is carried on simultaneously in formal rhetoric, in rhetorical analysis and in theme writing, the constant correlation of the three as methods of approach to the desired goal being kept in view. In addition a private reading course is assigned to the individual student. (*Required of all Freshmen; 3 hours.*)

ENGLISH II*a*.—*Development of English Prose.*—This course will follow the method of Minto's Manual in tracing historically the growth of the English prose literature, supplemented by collateral readings and by essays upon phases of the subject. (*First semester; 3 hours.*)

ENGLISH II*b*.—*Development of English Poetry.*—A continuation of the first semester's work in applying the method outlined to the study of English poetry. (*Second semester; 3 hours.*)

ENGLISH III*a*.—*Milton and the Epic.*—This course centers in a study of the Paradise Lost, around which are grouped studies in the Age of Milton and in the Epic as a type in Comparative Literature. The first four books of the poem are read in class. Written reviews on the remaining books alternate each week with essays from the student and lectures by the instructor on various phases of the subject. A reading course in the minor poets of the age and in the English translations of the great Epics is assigned to each student. (*First semester; 3 hours.*)

ENGLISH III*b*.—*Shakespeare and the Drama.*—This course follows the above method. Three of the Shakesperian plays are read in class. On eight others a written review is held each fortnight and on the alternate week essays are written, and lectures are given by the instructor. Readings in the English Drama from the Cycle plays to contemporary production are assigned. (*Second semester; 3 hours.*)

ENGLISH IV*a*.—*American Poetry.*—This course will take a rapid survey of the development of poetry in the United States and will then center in a critical study of a few of the more important authors (Bryant, Whittier, Longfellow, Emerson, Lowell, and Poe). (*First semester; 3 hours.*)

ENGLISH IV*b*.—*Southern Literature.*—A detailed study of the literature of the South with extensive reading and essay work, and an examination of the claims of Florida authors. (*Second semester; 3 hours.*)

ENGLISH V.—*The English Novel.*—In recognition of the fact that a large part of the reading of most Americans is in this line a course in the Novel is offered. This subject is studied in suitable texts from the two sides of chronological development and of technique; and the student reads a list of novels chosen to illustrate chronology and variety of species, analyzes minutely one novel from the technical side, masters the entire work and life of one novelist, and compares closely a novel and a dramatized version of it. It is hoped the student may be so grounded in the classics and his taste and judgment so trained that his reading in this class of literature may not become mere intellectual dissipation. (3 *hours.*)

ENGLISH VI.—*The Romantic Revival.*—This course is planned as a study in literary movement. The causes and forces which underlie the movement, its phenomena and the authors and works which exhibit them, and a comparison with other movements in literature will be considered. The work of Prof. Beers will be used as a basis and the student will be led, by means of extensive reading, by investigation and essays and by lectures on the wider ranges of the subject, to realize the truth of his statements. (3 *hours.*)

ENGLISH VII.—*Anglo-Saxon Grammar and Reading.*—Drill in the forms of the early language, and an elementary view of its relations to the other members of the Aryan family and of its

development into Modern English. The texts in Bright's Anglo-Saxon Reader are studied and Cook's edition of Judith is read. (3 *hours.*)

English VIII.—*Chaucer and the Middle English Grammar.*—During the first semester the works of Chaucer are read in and out of class. The pronunciation, grammatical forms, scansion, condition of text, analogues and sources are closely examined. During the second semester, Morris and Skeats' Specimens, Part II, is studied in connection with informal lectures on Middle English viewed as developing from Anglo-Saxon into Modern English. (*Prerequisite, English VII;* 3 *hours.*)

English IX.—*Engineering Exposition.*—This course will attempt to give special training to the Engineering student in the preparation of the various kinds of writing that he will be called upon to do in the pursuit of his profession. It will consist largely of the writing of papers (upon subjects assigned by the departments in the College of Engineering), which will be criticised and revised. (*Engineering Seniors;* 1 *hour.*)

HISTORY AND THE SOCIAL SCIENCES

Professor Bernard

Students entering the University for the first time who have not had satisfactory courses in European or American history are advised to include these subjects in their courses of study as a general cultural foundation for their other work. It is also recommended to those who expect to elect more than one course in the social sciences that they begin with the first course in sociology, this being the most general course in the social sciences.

History I.—*European History.*—The growth of civilization in Europe in its various aspects from the earliest historical times to the present. (3 *hours.*)

History II.—*American History.*—The growth of nationalism, democracy, and industrialism in the United States, with particular reference to the origins of the problems of to-day. (3 *hours.*)

History III.—*History of Democracy.*—Not offered in 1914-1915. (3 *hours.*)

History IV.—*Industrial History of England and the United States.*—Not offered in 1914-1915. (3 *hours.*)

ECONOMICS

ECONOMICS I.—*Principles of Economics.*—The leading facts regarding business, money, banking, industrial organization, labor, taxation, tariffs, governmental regulation. (3 *hours.*)

ECONOMICS II.—*Selected Problems.*—Not offered in 1914-1915. (3 *hours.*)

ECONOMICS III*b.*—*Agricultural Economics.*—Business methods on the farm, markets, rural credits, and cooperation. (*Second semester;* 3 *hours.*)

POLITICAL SCIENCE

POLITICAL SCIENCE I.—*American Government.*—Federal, State, and local governments, with particular reference to the actual practice of legislation, administration, and the courts. Current political problems. (3 *hours.*)

POLITICAL SCIENCE II*a.*—*Principles of Political Science.*—Not offered in 1914-1915. Offered in 1915-1916. (*First semester;* 3 *hours.*)

POLITICAL SCIENCE II*b.*—*European Governments.*—Not offered in 1914-1915. Offered in 1915--1916. (*Second semester;* 3 *hours.*)

SOCIOLOGY

SOCIOLOGY I.—*Principles of Sociology.*—The evolution of social institutions, with particular reference to the family; selected social problems, such as population, race, immigration, poverty, crime, the church, education, and social reform. (3 *hours.*)

SOCIOLOGY II*a.*—*Modern Philanthropy.*—Causes and conditions of poverty and pauperism, preventive measures, relief, administration. (*First semester;* 3 *hours.*)

SOCIOLOGY II*b.*—*Criminology.*—Causes, prevention and treatment of crime and criminals, with particular reference to Southern conditions. (*Second semester;* 3 *hours.*)

SOCIOLOGY III*a.*—*Rural Sociology.*—Rural life in relation to sanitation, the school, the church, and various other cooperative enterprises. (*First semester;* 3 *hours.*)

SOCIOLOGY III*b.*—*Southern Race Problems.*—A study of the Negro Problem in its anthropological, social, political, and economic aspects. (*Second semester;* 3 *hours.*)

SOCIOLOGY IV.—Seminar.

SOCIOLOGY V*a* or *b.*—*Current Public Problems.*—(*Either semester;* 1 *hour.*)

MATHEMATICS AND ASTRONOMY

Professor Keppel

MATHEMATICS

The work in the Department of Mathematics is planned with a threefold purpose in view:

1. For students who intend to *specialize* in Mathematics it provides the preparation for more advanced work. Several advanced courses are offered each year for this class of students.

2. To those who need Mathematics as an *instrument* it offers opportunities to become familiar with this instrument. The application of Calculus not only to Physics, Chemistry and Engineering, but even to such seemingly remote realms as Psychology and Political Economy, makes it advisable that this class should continue the study of Mathematics at least so far as to include Calculus.

3. To others it gives logical training in Analysis and Proof, introduces them to that scientific method par excellence of the Hypothesis, and develops the idea of a deductive system in its classical form.

The following courses are offered each year:

MATHEMATICS A.—Solid Geometry. (2 *hours.*)

MATHEMATICS B.—Plane and Spherical Trigonometry, (2 *hours.*)

MATHEMATICS I.—Plane Analytic Geometry and College Algebra. (3 *hours.*)

MATHEMATICS II.—Spherical Trigonometry and Elementary Calculus. (1 *hour.*)

MATHEMATICS III.—Differential and Integral Calculus. (3 *hours.*)

MATHEMATICS IV.—Solid Analytic Geometry and Calculus. (2 *hours.*)

MATHEMATICS V.—Advanced Calculus and Differential Equations. (3 *hours.*)

The following advanced courses were given in 1913-14:

MATHEMATICS VI.—Theory of Equations and Modern Higher Algebra. (3 *hours.*)

MATHEMATICS VII.—Modern Projective Geometry. (3 *hours.*)

ASTRONOMY

In connection with the Department of Mathematics a course in GENERAL ASTRONOMY is offered, consisting of lectures and recitations, with practical exercises. No knowledge of advanced mathematics is presupposed. (*2 hours.*)

MILITARY SCIENCE AND TACTICS

Major Walker

Military instruction at the University of Florida is ***not optional,*** but is required by law—by the law of the United States and by the law of the State.

The instruction is both practical and theoretical. The practical course consists of drills, target practice, and other military exercises. The drills proper do not exceed three hours per week.

The course in military science is necessary for graduation. Except as noted below all students are required to take this course.

EXCUSED FROM MILITARY DUTY.—Law students, graduates, Seniors, adult specials, those holding discharges from the U. S. army, navy, or marine corps after at least one term of enlistment, and the physically disqualified.

The physically disqualified will be required to submit a certificate to that effect from the resident physician and they will also, prior to graduation, be required to make up an equivalent amount of work in this or some other department.

Those who have served for three years in the national guard will be excused from drills and will also be excused from theoretical work, provided they pass a satisfactory examination—the examination to be prescribed by the Professor of Military Science and Tactics.

Students will be given credit, year for year, for work done at military schools having army officers as instructors.

Those taking the One-Year or Two-Year Course in Agriculture are excused from the theoretical, but not from the practical course.

In the Teachers College those only are excused who are studying to become teachers.

All applications to be excused from military duty for other reasons must be submitted to the Professor of Military Science and Tactics, and all who are required to take military work must

report to him within five days after registering at the University.

The theoretical course set forth below consists of recitations, supplemented by lectures.

MILITARY SCIENCE I.—(a) Infantry Drill Regulations; (b) Small-arms Firing Regulations. (*Required of Freshmen;* 1 *hour.*)

MILITARY SCIENCE II.—Field-service Regulations, Company Administration, Camp Sanitation, and Military Map Reading. (*Required of Sophomores;* 1 *hour.*)

MILITARY SCIENCE III.—The Service of Security and Information, Elementary Military Engineering, Army Regulations, and similar subjects. (*Elective for Juniors and Seniors;* 2 *hours.*)

MODERN LANGUAGES

Professor Crow

French, German, and Spanish are the subjects taught in this department. Extensive courses of reading, in and out of class, frequent exercises, oral and written, and studies in the Literature and Languages of the respective countries form the chief feature of instruction. Carefully prepared English abstracts of nearly all the parallel reading is required.

Authors and text-books vary from year to year. Though the classics are not neglected, special attention is paid to the literatures of the Nineteenth Century

Since the session of 1906-07 tables have been set apart in the dining-hall for those wishing to speak German and Spanish.

All of the courses offered below will not be given in any one year.

FRENCH

FRENCH I.—*Elementary Course.*—Drill in pronunciation and important grammatical forms, elementary syntax, dictation, daily written exercises, memorizing of vocabularies and short poems, translation. (3 *hours.*)

FRENCH II.—*Intermediate Course.*—Work of elementary course continued, advanced grammar, including syntax, prose composition, translation of intermediate and advanced texts, sight reading, parallel. (3 *hours.*)

FRENCH III.—*Advanced Course.*—Syntax, stylistic, composition, history of French Literature, selections from the dramatists or novelists as class may decide. (3 *hours.*)

FRENCH IV.—*Old French.*—A course will be offered in Romance Philology open only to those who have taken French III and Latin II. (3 *hours.*)

GERMAN

GERMAN I.—*Elementary Course.*—Drill in pronunciation and important grammatical forms, elementary syntax, dictation, daily written exercises, memorizing of vocabularies and short poems, translation. (3 *hours.*)

GERMAN II.—*Intermediate Course.*—Work of elementary course continued, advanced grammar, including syntax, prose composition, translation of intermediate texts, sight reading, parallel. (3 *hours.*)

GERMAN III.—A supplementary course in commercial German will be offered to students who are taking or have concluded German II. For the present this course will not count towards a degree. (2 *hours.*)

GERMAN IV.—*Advanced Course.*—Syntax, stylistic, composition, history of German Literature, selections from the dramatists or novelists. (3 *hours.*)

GERMAN V.—*Scientific Reading Course.*—A course in reading scientific German is offered. The nature of the course will depend largely upon the needs of the students taking it. (*Prerequisite, German II;* 3 *hours.*)

GERMAN VI.—Courses are offered in Middle and Old High German. (*Prerequisite, German IV;* 3 *hours.*)

SPANISH

SPANISH I.—*Elementary Course.*—Drills in pronunciation and important grammatical forms, elementary syntax, dictation, daily written exercises, memorizing of vocabularies and short poems, translation. (3 *hours.*)

SPANISH II.—*Intermediate Course.*—Work of elementary course continued, advanced grammar, including syntax, prose composition, translation, parallel. (3 *hours.*)

PHILOSOPHY

Professor Cox

The primary aim of this department is to give the student a broad outlook upon life in general, as well as to give him a better understanding of his own life from psychological, ethical and

metaphysical viewpoints. Philosophy lies nearer to-day than ever before to the various sciences on the one hand, and to the demands of practical life on the other. Students desiring to take work in this department may begin with Course I*a*, Course II*a*, or with Course III*a*. Juniors and Seniors may begin also with Course VII*a*.

Another very important aim of this department is to aid in the professional training of teachers. For description of the laboratory equipment for carrying on mental and physical tests, see page 24.

Philosophy I*a*.—*General Psychology*.—This course aims to acquaint the student with the facts and theories that are current in general psychological discussion. The study will begin with the sensations, the sense organs, and the functions of the brain; the course will then deal with the higher mental functions, such as attention, perception, memory, feeling, emotion, volition, the self, and like topics. (*First semester; 3 hours.*)

Philosophy I*b*.—*Experimental Psychology*.—This course will be mainly laboratory work. The student learns to work with the standard apparatus, and becomes somewhat familiar with the current problems in Experimental Psychology. Special attention will be given to methods of psychological investigation, and the collection and treatment of data. (*Second semester; 3 hours.*)

Philosophy II*a*.—*Ethics*.—A general course in which emphasis will be laid upon the Principles of Ethics. This will involve the study of such topics as goodness, happiness, virtue, duty, freedom, civilization, and progress. Some time will also be given to the history of the various Ethical Systems. (*First semester; 3 hours.*)

Philosophy II*b*.—*Practical Ethics*.—A study of the moral problems of the individual and social life. (*Second semester; 3 hours.*)

Philosophy III*a*.—*Logic, Inductive and Deductive*.—This course will emphasize practice in use of syllogisms, inductive methods, logical analysis, and criticism of fallacies. (*First semester; 3 hours.*)

Philosophy III*b*.—*The Philosophical Poets*.—A study of the philosophical problems and their solution as given by the world's greatest poets. Such problems as Creation, Nature, Life, Free-

dom and Conduct will be given special attention. (*Second semester; 3 hours.*)

PHILOSOPHY IV*a*.—*Social Psychology.*—A study of the influences of the social environment upon the mental and moral development of the individual. (*First semester; 3 hours.*)

PHILOSOPHY IV*b*.—*Abnormal Psychology.*—A study of the abnormal phases of mental life. Such topics as dreams, illusions, hallucinations, suggestion, hypnotism, hysteria, diseases of the memory, diseases of the will, and other mental diseases. Special attention will be given to mental hygiene. (*Second semester; 3 hours.*)

PHILOSOPHY V*a*.—*Genetic Psychology.*—A study of the course of development in the child from birth to adolescence. (*First semester; 3 hours.*)

PHILOSOPHY V*b*.—*Genetic Psychology.*—A study of animal intelligence. The purpose of this course is to give the student a better understanding of animal instincts and intelligence. (*Second semester; 3 hours.*)

PHILOSOPHY VI*a*.—*Philosophy of Conduct.*—A study of the problems of Conduct and Religion in the light of contemporary discussion. The aim of this course is to attack the problems of philosophy from the standpoint of the practical problems of every-day life. (*First semester; 3 hours.*)

PHILOSOPHY VI*b*.—*Philosophy of Nature.*—The aim of this course is to show Man's relation to Nature, and his place in Nature. It will take up the various philosophical doctrines, such as Animism, Pantheism, Materialism, Realism, Agnosticism, Humanism, Idealism, etc. (*Second semester; 3 hours.*)

PHILOSOPHY VII*a*.—*History of Ancient Philosophy.*—This course will trace the development of philosophic thought from its appearance among the Ionic Greeks to the time of Descartes. Special attention will be given to the philosophy of Plato and Aristotle. (*First semester; 3 hours.*)

PHILOSOPHY VIII*a*.—*Advanced Psychology.*—A study of the theoretical and practical problems in the field of modern psychology. This course introduces the student to the theoretical problems that are attracting the attention of modern psychologists. It also emphasizes the practical aspects of psychology as it is applied to Business, Law, Medicine, Education, etc. (*First semester; 3 hours.*)

PHILOSOPHY VIIIb.—*Advanced Psychology.*—Continuation of VIIIa. (*Second semester; 3 hours.*)

PHYSICS

Professor Benton
Mr. Perry

The work of this department is intended to meet the needs, on the one hand, of those who study physics as a part of a liberal education, and on the other hand, of those who will have to apply physics as one of the sciences fundamental to engineering.

Instruction is given by (1) recitations based upon lessons assigned in text-books; (2) laboratory work, in which the student uses his own direct observation to gain knowledge of the subject; (3) lectures, in which experimental demonstrations of the principles under discussion are given; and (4) seminar work in the advanced courses, in which the various members of the class take up different special problems requiring extended study or investigation, and report upon them in turn to the class.

The physical laboratory is well equipped for the experiments usually required in undergraduate laboratory work in the best colleges. The equipment has been greatly increased in the last few years, and additions are made to it from year to year. For a description, see page 23.

The following courses are offered:

PHYSICS I.—General Physics, including mechanics, heat, acoustics, and optics, but not electricity and magnetism. A knowledge of plane trigonometry is pre-supposed. Text-book to be used in 1914-1915: Kimball's College Physics. (1 *lecture and* 2 *recitations per week.*)

PHYSICS II.—General laboratory physics, to accompany Physics I. A knowledge of plane trigonometry is pre-supposed. Text-book to be used in 1914-1915: Franklin, Crawford and McNutt's Practical Physics. (2 *exercises of* 2 *hours each per week.*)

PHYSICS III.—General electricity and magnetism, being a continuation of Physics I. Text-book to be used in 1914-1915: Franklin and McNutt's Elements of Electricity and Magnetism. (2 *recitations and* 1 *laboratory exercise of* 2 *hours per week.*)

ADVANCED COURSES IN PHYSICS.—Preparation has been made for offering advanced courses in physics, as electives for Juniors.

Seniors and Graduate Students. Six such courses have been planned, as follows: Advanced Experimental Physics, General Mathematical Physics, Mechanics and Acoustics, Heat, Optics, Theoretical Electricity. Each of these courses is arranged to extend through two semesters and to require three hours per week of classroom work, or equivalent time in the laboratory. Any one of these courses will be given when elected by three or more students.

COLLEGE OF AGRICULTURE

FACULTY

ALBERT A. MURPHREE, A.M., LL.D.,
President of the University.

J. J. VERNON, B.Agr., M.S.A.,
Dean of the College of Agriculture and Professor of Agronomy.

W. L. FLOYD, M.S.,
Professor of Horticulture.

C. L. WILLOUGHBY, B.Agr.,
Professor of Animal Husbandry and Dairying.

C. K. McQUARRIE,
Professor of Agricultural Extension.

I. D. ODLE, B.S.,
Instructor in Botany and Bacteriology.

J. F. DUGGAR, JR., B.S.,
Instructor in Soils and Fertilizers.

C. A. MARTINI,
Assistant in Correspondence Courses.

JAS. M. FARR, A.M., Ph.D.,
Professor of English Language and Literature.

E. R. FLINT, B.S., Ph.D., M.D.,
Professor of Chemistry.

JAS. N. ANDERSON, M.A., Ph.D.,
Professor of Ancient Languages.

C. L. CROW, M.A., Ph.D.,
Professor of Modern Languages.

LUTHER LEE BERNARD, Ph.D.,
Professor of History and Economics.

H. S. DAVIS, Ph.D.,
Professor of Zoology and Entomology.

H. G. KEPPEL, A.B., Ph.D.,
Professor of Mathematics and Astronomy.

MAJOR E. S. WALKER, U.S.A., Retired,
Professor of Military Science.

JOHN A. THACKSTON, Pd.M., Ph.D.,
Professor of Education.

HARVEY W. COX, A.M., Ph.D.,
Professor of Philosophy.

L. W. BUCHHOLZ, A.M.,
Professor of Elementary Education, Methods and Supervision.

EDNA M. BERWICK, *Secretary and Stenographer.*

A. G. COLCLOUGH, *Farm Foreman.*

SPECIAL LECTURERS FOR 1914-15.

HON. W. A. MCRAE,
Commissioner of Agriculture, Tallahassee, Fla.

PROFESSOR H. HAROLD HUME,
President State Horticultural Society, Glen St. Mary, Fla.

HON. C. F. BARBER,
President State Live Stock Association, Macclenny, Fla.

DR. CHAS. F. DAWSON,
Veterinarian, State Board of Health, Jacksonville, Fla.

DR. E. H. SELLARDS,
State Geologist, Tallahassee, Fla.

CAPT. R. E. ROSE,
State Chemist, Tallahassee, Fla.

DR. E. W. BERGER,
State Nursery Inspector, Gainesville, Fla.

GENERAL STATEMENT

The College of Agriculture is intended to meet the requirements of the Acts of Congress creating and endowing colleges in the different States. From these Acts it is apparent that recognition of agriculture as a branch of collegiate instruction is a distinctive feature of the institutions thus founded. The aim of the College is to offer young men the best possible preparation for agricultural pursuits. The courses afford opportunity for gaining both technical knowledge and training in the art of agriculture. Since about one-third of the student's time is devoted to agricultural branches and the other two-thirds to the basic sciences and cultural studies, a broad foundation is laid which will enable him, upon graduation, to become either a leader in educational work or an effective producing agriculturist.

The group courses offered during the Sophomore, Junior, and Senior years afford opportunity for selecting and preparing for the phase of agriculture best suited to the qualifications and

taste of the individual students. Those who wish to pursue general farming will elect the agronomy or animal husbandry group. Those interested in fruit production or market gardening will elect the horticultural group. The chemical group will interest those who wish to become expert agricultural analysts. There is a demand for teachers competent to give instruction in agriculture, and in the years to come this demand will grow in Florida as it has grown in other agricultural States. In order to meet this need a special group has been prepared for teachers. The present demand for experienced agricultural teachers cannot be supplied; therefore agriculture forms an attractive subject for ambitious young men who contemplate teaching.

Great care should be exercised by students in the selection of a group course, for the selection should be such as to fit them best for their life work in one of the numerous lines of agriculture.

EQUIPMENT.—*Agricultural Hall.*—Agricultural Hall, the new building for the erection of which the Legislature of 1911 generously appropriated funds, provides space for department offices; for classrooms in Agronomy, Animal Husbandry and Agricultural Engineering; for laboratories in soils and fertilizers, crops and grain judging, farm machinery, farm power, stock judging, dairying, milk testing, poultry practice, etc.

The new classrooms and laboratories were specially planned to meet the needs of the instruction to be given, and a large amount of apparatus has been added that materially strengthens the work of the College.

Library.—The Agricultural Library is small but well selected, and is added to every year. The leading technical books and a fairly complete set of State Experiment Station and Government Bulletins are placed within easy reach of the students. Nearly six hundred dollars from the special Library appropriation made by the Legislature of 1911 has been recently expended for the latest technical agricultural books. The general library is also open to the students of the College.

The College Farm.—The farm connected with the College of Agriculture, used for instruction purposes and for growing crops with which to feed the instruction herds, consists of 135 acres: about 20 acres for trucking, 95 acres for pasture and general field crops, 10 acres for orchard, 7 acres for soiling

purposes and stock lots, and 3 acres for buildings and grounds, where a hay and feed barn now stands and where other buildings will be erected during the year. The Legislature of 1913 appropriated $15,00.00 for the College of Agriculture, to be expended during the biennial period on buildings and equipment. A portion of this fund will be used for the erection of a farm foreman's house, a modern dairy barn, an irrigation system illustrating the various possible and practical methods of irrigation, and a machinery shed and corn crib.

SCHOLARSHIPS.—The following scholarships in agriculture were available during 1913-1914:

Southern Railway Scholarship—William Wilson Finley Foundation, $200.

Taylor County six, and Clay County two scholarships of $25.00 each, covering the Farmers' Short Course, available for members of the Boys' Corn Clubs.

AGRICULTURAL CLUB.—Membership in the Agricultural Club, a description of which is to be found on page 38, is strongly urged upon all students of the College.

AGRONOMY DEPARTMENT

The Agronomy Department occupies four rooms—a large, well-lighted, well equipped soil laboratory, with an adjoining storage and work room, and a large crop judging laboratory, with an adjoining mouse-proof storage room for seed and forage crops.

The soil laboratory equipment comprises microscopes, sampling augers, tubes and carriers; balances, ovens, soil thermometers, packers, cylinders, and tubes; moisture absorption box with trays; percolation, capillary, and evaporation apparatus; sieves, shaker, etc. The equipment is of the best type and fully adequate for giving thorough courses in soils. There are three large stone-top desks with individual lockers for seventy-two students. The storage room is provided with soil bins, packer, cases, and shelving in abundance.

The field crop laboratory is provided with five long judging tables and the storage room for seed and forage is lined with suitable shelving.

For Agricultural Engineering work, which for the present is connected with the Agronomy Department, there are two specially

equipped laboratories—the one for farm motors and iron work, the other for farm machinery and wood work.

These laboratories are equipped with a large collection of modern labor-saving machinery, consisting of gasoline engines, windmills, feed grinders, stalk cutter, walking and riding plows, various types of harrows, walking and riding cultivators, seeders, one and two-horse corn planters, manure spreader, etc. Special stress is placed upon instruction in farm machinery, because labor-saving machinery has not yet come into general use upon Florida farms.

Donations and Loans.—The laboratories have been supplied with much of this labor-saving farm machinery for the purpose of instruction through the generosity of the following manufacturers:

The John Deere Plow Company, Atlanta, Ga.

International Harvester Company, Chicago, Ill., and Jacksonville, Fla.

Stover Manufacturing Company, Freeport, Ill.

Perkins Windmill Company, Mishawaka, Ind.

Through an agreement to carry out demonstration tests on the College farm, the J. I. Case Plow Works, Racine, Wis., has provided the farm laboratory with a complete equipment of up-to-date crop growing machinery.

ANIMAL HUSBANDRY DEPARTMENT

The Animal Husbandry Department is provided with a large lecture and judging room containing tiered seats for sixty students, and a paddock, 12x24 feet in size, with concrete floor and iron railings, for exhibiting and judging animals. The equipment includes a two-ton Fairbanks platform scale, tape lines, measuring standards, and projectors.

A basement room in Science Hall is being fitted for practice in butchering and curing of meats, in order to familiarize students with the cuts of the animal carcass and the best methods of saving meat.

The equipment in *Veterinary Science* consists of excellent mounted skeletons of the horse and cow, several wall charts on anatomy and physiology, a set of veterinary operating instruments, and sample jars of common drugs, medicines, and extracts.

For *Dairy Work,* which for the present is connected with the Animal Husbandry Department, the College has a large, well lighted laboratory. The equipment includes several makes of hand power cream separators, several patterns of swing and barrel churns, four styles of lever and hand power butter workers, two combined churn and butter workers, butter packers, shipping cases, etc.; a large Cooley creamer, starter and mixing cans, vats for cream ripening and cheese making; a milk cooler, Pasteurizer, bottling machine, storage refrigerator, creamery scales, and the necessary cans, buckets, bottles, and brushes. Two wash sinks and a sterilizer chest are installed. The entire laboratory is supplied with hot water and steam.

The milk testing laboratory contains working desks and machinery for all the modern tests of dairy products. The equipment includes Babcock testers of different sizes, cream scales, lactometers, acidmeters, butter moisture tests, and the necessary glassware, reagents, etc.

Live Stock.—The equipment in live stock is fairly well begun, and the individuals on hand are of high grade. A special fund provided by the legislature is being used to buy additional dairy cattle, sheep, and swine. The herds now include Jersey and Shorthorn cattle, Tamworth and Duroc Jersey swine; and will be increased from year to year, by breeding and as additional funds are secured for the purpose, until representatives of all the important breeds and classes of farm animals are available for use in the courses in the breeds of live stock and score card judging.

The legislature has provided funds for a sanitary concrete dairy barn, including a silo and feed mixing room, with modern stable equipment and (probably) milking machines. Through the aid of the Florida State Board of Health and the Alachua County Live Stock Club, one of the best concrete cattle dipping vats in the State has been constructed for the use of the College and the public. A number of modern pens and portable houses for hogs, with equipment suitable to Southern conditions, are being built.

A poultry plant, including several colony houses and yards, has been started, and is already well equipped with incubators, brooders, pens, coops, feed troughs, and fixtures. A number of the leading poultry breeders of the State are aiding the Depart-

ment by sending breeding pens of prize winning poultry to the College for exhibit and for judging purposes.

HORTICULTURAL DEPARTMENT

The Horticultural Department occupies for the present quarters in Science Hall. Laboratories where various kinds of indoor work may be done are here provided. The propagation work is done in a propagating house and nursery, where stratification, layerage, cuttage, budding, grafting, and other operations with plants are carried on. Trees of different ages and varieties are growing in the orchard, and the number of these will be increased as the work develops. Cold frames and covers for starting young plants and for growing certain tender vegetables to maturity in winter are used in trucking. An irrigation plant is being installed in the trucking area. It includes several different types adapted to Florida conditions.

COURSES OFFERED

The following courses are offered:

1. A Four-Year Course.
2. A Middle Course of Two Years.
3. A One-Year Course.
4. Two Four-Month Courses.
5. A Ten-Day Short Course for Farmers.
6. Fourteen Correspondence Courses for Home Study.

FOUR-YEAR COURSE

Entrance Requirements.—A detailed description of the entrance requirements for admission to the four-year course of the College of Agriculture will be found on pages 39 to 46, inclusive.

While one unit of agriculture is required, owing to the fact that agriculture has been so recently included in the curriculum of the public high schools by legislative enactment, candidates will be allowed to take the agricultural work in which they are deficient during the Freshman year.

Degrees.—The regular four-year course culminating in one of the five groups—Agronomy, Horticulture, Animal Husbandry, Agricultural-Chemical, or Agricultural-Normal—leads to the degree of Bachelor of Science in Agriculture (B. S. A.). One year of additional work leads to the degree of Master of Science in Agriculture (M. S. A.).

Credits for Practical Work.—Students who, by previous

agreement with the head of a department and the Dean, do practical work, during their course of study, on farms, in groves, nurseries, dairies, or breeding establishments; in syrup, sugar, or canning factories; or in other recognized agricultural lines, and who render competent and faithful service, will, on their return to College and on the presentation of a concise written report or résumé of their observations and experience, be entitled to one semester hour credit for each month of such work. Such credit shall not total more than six semester hours in the two-year and four-year courses. Students must have at least three months of practical work before graduation, but credit will be given for such work only as stated above.

Remunerative and Instructive Labor.—Students are afforded opportunity to do considerable work in the fields and truck gardens, about the barns, and in the buildings. Some careful and industrious students secure work in the Agricultural Experiment Station. The compensation for services of this nature usually ranges from eight to twenty cents per hour, according to the experience of the student and the nature of the work. Every year several students are enabled not only to earn part of their expenses but also to strengthen their education by the practical knowledge thus gained. Students who during vacation periods find employment on farms and in other positions allied to agriculture will be markedly benefited and after graduation will be able to command more desirable and remunerative positions, or will find their efforts on the farm more effective. In this connection emphasis should be placed upon a thorough understanding of the practical application of scientific principles.

Laboratory Work.—Two hours of laboratory work are given one hour credit in estimating the total number of hours in the following courses:

CURRICULUM

Leading to the Degree of Bachelor of Science in Agriculture

FOR ALL GROUPS

Freshman Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Agronomy I	Soil Physics	2	2
Horticulture I	Plant Propagation	2	0
Horticulture II	Greenhouse Management	0	2
Animal Husbandry I	Types and Breeds of Animals	2	2
Agricultural Engineering I	Farm Machinery and Farm Motors	2	2
Botany I	General Botany	3	3
English I	Advanced College Rhetoric	3	3
Mathematics B	Plane Trigonometry	2	2
Agricultural Seminar		1	1
†Library Work		R	R
Military Science I	Drill and Firing Regulations	1	1
		18	18

FOR ALL GROUPS EXCEPT ANIMAL HUSBANDRY

Sophomore Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Agronomy II	Fertilizers	0	3
Horticulture III	Trucking	2	2
Chemistry I-II	General Inorganic Chemistry	5	5
Botany II	Plant Physiology	3	0
Zoology I	General Zoology	3	0
Zoology III	Entomology	0	3
Military Science II	Field Regulations and Guard Duty	1	1
Elective		2	2
		16	16

*The first column gives the hours per week for the first semester, the second column the hours per week for the second semester.

†A total of sixteen actual hours of Library Work required.

AGRONOMY GROUP

Junior Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Agronomy III	Field Crops	3	0
Agronomy IV	Forage Crops and Grasses	0	2
Agronomy V	Rural Law and Farm Accounts	0	3
Chemistry III*a*	Qualitative Analysis	3	0
Chemistry VII*b*	Quantitative Analysis	0	3
Botany IV	Plant Pathology	3	0
Bacteriology I	General Bacteriology	3	0
Bacteriology II	Agricultural Bacteriology	0	3
Elective		4	5
		16	16

Senior Year

Agronomy VI	Farm Management	0	2
Horticulture X	Landscape Gardening	0	2
Agricultural Engineering II	Buildings, Roads, Irrigation and Drainage	3	0
Chemistry VIII	Chemistry of Soils, Fertilizers, etc.	3	0
Sociology III and Economics III	Rural Sociology / Agricultural Economics	3	3
or Economics I	Principles of Economics		
Agricultural Education I	Extension Teaching	0	2
Elective		7	7
		16	16

Note.—The elective hours may, with the approval of the Dean, be chosen from the other groups or from other colleges.

HORTICULTURAL GROUP

Junior Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Horticulture IV	Citrus Culture	3	0
Horticulture V	Citrus Harvesting and Marketing	0	2
Horticulture VII	Deciduous Fruits	3	0
Horticulture VIII	Plant Breding	0	3
Agronomy V	Rural Law and Farm Accounts	0	3
Botany IV	Plant Pathology	3	0
Bacteriology I	General Bacteriology	3	0
Bacteriology II	Agricultural Bacteriology	0	3
Elective		4	5
		16	16

*The first column gives the hours per week for the first semester, the second column the hours per week for the second semester.

Senior Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Horticulture X	Landscape Gardening	0	2
Horticulture VI or Horticulture IX	Insects and Diseases of Citrus Fruits / Forestry	3	0
Agronomy VI	Farm Management	0	2
Agricultural Engineering II	Buildings, Roads, Irrigation and Drainage	3	0
Agricultural Education I	Extension Teaching	0	2
Chemistry IX	Chemistry of Soils, Fertilizers, etc.	3	0
Sociology III and Economics III or Economics I	Rural Sociology / Agricultural Economics / Principles of Economics	3	3
Elective		4	7
		16	16

AGRICULTURAL-CHEMICAL GROUP

Junior Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Chemistry IV	Qualitative Analysis	5	5
Chemistry V	Organic Chemistry	3	3
Bacteriology I	General Bacteriology	3	0
Bacteriology II	Agricultural Bacteriology	0	3
Elective		5	5
		16	16

Senior Year

Chemistry VIII	Quantitative Analysis	7	7
Economics I	Principles of Economics	3	3
Elective		6	6
		16	16

*The first column gives the hours per week for the first semester, the second column the hours per week for the second semester.

AGRICULTURAL-NORMAL GROUP

Junior Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Education I	Psychology	3	0
Education II	General Methods	0	3
Education III*a*	Special Methods	3	0
Education IV	School Management and Supervision	0	3
Agronomy III	Field Crops	3	0
Agronomy V	Rural Law and Farm Accounts	0	3
Horticulture IV	Citrus Culture	3	0
Horticulture V	Citrus Harvesting and Marketing	0	2
Animal Husbandry II	Animal Feeding	3	0
Animal Husbandry III	Animal Breeding	0	3
Elective		1	2
		16	16

Senior Year

Education V	History of Education	3	0
Education VI	Secondary Education	0	3
Education VII	Principles and Philosophy of Education	3	3
Agricultural Education I	Methods of Teaching Agriculture	1	0
Agricultural Education II	Extension Teaching	0	2
Agronomy VI	Farm Management	0	2
Agricultural Engineering II	Buildings, Roads, Irrigation and Drainage	3	0
Economics III	Agricultural Economics	0	3
Sociology III	Rural Sociology	3	0
Elective		3	3
		16	16

ANIMAL HUSBANDRY GROUP

Sophomore Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Animal Husbandry II	Animal Feeding	3	0
Animal Husbandry III	Animal Breeding	0	3
Dairying I	Dairy Testing	2	0
Dairying II	Farm Buttermaking	0	2
Chemistry I-II	General Inorganic Chemistry	5	5
Zoology I	General Zoology	3	3
Military Science II	Field Regulations and Guard Duty	1	1
Elective		2	2
		16	16

*The first column gives the hours per week for the first semester, the second column the hours per week for the second semester.

Junior Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Animal Husbandry IV	Beef Production	2	0
Animal Husbandry V	Swine Production	0	2
Animal Husbandry VI	Animal Hygiene	3	0
Animal Husbandry VII	Animal Diseases	0	3
Agronomy III	Field Crops	3	0
Agronomy IV	Forage Crops and Grasses	0	2
Bacteriology I	General Bacteriology	3	0
Bacteriology II	Agricultural Bacteriology	0	3
Elective		5	6
		16	16

Senior Year

Animal Husbandry VIII	Poultry Culture	2	0
Animal Husbandry IX	Seminar	0	2
Dairying III	Dairy Farming	2	0
Dairying IV	City Milk Supply	0	2
Agronomy VI	Farm Management	0	2
Agricultural Engineering II	Buildings, Roads, Irrigation and Drainage	3	0
Sociology III and Economics III or Economics I	Rural Sociology / Agricultural Economics / Principles of Economics	3	3
Elective		6	7
		16	16

*The first column gives the hours per week for the first semester, the second column the hours per week for the second semester.

DEPARTMENTS OF INSTRUCTION

AGRONOMY AND AGRICULTURAL ENGINEERING

Professor Vernon
Mr. Duggar
Mr. Martini

AGRONOMY

Agronomy is the science and art of crop production. It includes—Soils: Classification, fertility, cultivation, and improvement; Crops: Classification, production, and improvement; and Management: The application of economic business methods to farm practices.

The laboratory work and field observations aim to fix the principles learned in the class room and to give them practical application.

AGRONOMY A*a*.—*Elements of Agronomy.*—A study of soils and soil fertility in their relations to plant growth, and the underlying principles governing the production of field and forage crops. (*Eleventh Grade, Practice High School, Teachers College; 3 hours.*)

AGRONOMY I.—*Soil Physics.*—The origin, formation, classification, moisture, ventilation, temperature of soils; general methods of soil management and amelioration, etc. (*Freshman year; 2 hours.*)

AGRONOMY II*b*.—*Fertilizers.*—The nature of plant food and its relation to the composition of soils, sources and composition of commercial fertilizers and principles governing their application, the making and economical use of farm manures, fertilizer requirements of various crops, and other related topics. (*Sophomore year; 3 hours.*)

AGRONOMY III*a*.—*Field Crops.*—The various grain, fiber, and sugar crops will be discussed with respect to their habits of growth, soil adaptations, fertilizer requirements, general methods of tillage and harvesting, and the most profitable forms

*The letter *a* after a numeral indicates that the course is given during the first semester, the letter *b* during the second semester. Where neither *a* nor *b* appears, the course, unless otherwise explained, continues throughout the year.

in which to market them. Special attention will be given to corn, cotton, and sugar cane. (*Junior year; class 2 hours, Laboratory 2 hours; credit 3 hours.*)

AGRONOMY IV*b*.—*Forage Crops and Grasses.*— A study will be made of forage crops and grasses, including an investigation into their adaptability to the various Florida soils, seeding and cultural methods, harvesting and storing, composition and use, illustrated by specimens brought before the students and by field observations. (*Junior year; Class 1 hour, Laboratory 2 hours; Credit 2 hours.*)

AGRONOMY V*b*.—*Rural Law and Farm Accounts.*—Classification of property, boundaries, fences, stock laws, rents, contracts, deeds, mortgages, taxes, laws governing shipping, and other topics of special interest to farmers will be treated; and a system of farm bookkeeping will be worked out, using the transactions of the College farm as a basis for material for instruction. (*Junior year; 3 hours.*)

AGRONOMY VI*b*.—*Farm Management.*—A study of the principles underlying farm management; specialized and general farming; problems of labor, machinery, storing, marketing; laying out farms, systems of rotation, etc. (*Senior year; 2 hours.*)

AGRICULTURAL ENGINEERING

AGRICULTURAL ENGINEERING A*b*.—*Elements of Agricultural Engineering.*—A study of farm machinery and farm motors, irrigation, drainage, buildings, sanitation, roads, fences, etc., elements essential to profitable plant and animal production and the making and maintenance of comfortable, healthful homes. (*Twelfth grade, Practice High School, Teachers College; 3 hours.*)

AGRICULTURAL ENGINEERING I.—*Farm Machinery.*—The course includes a study of the history of the development, details of construction, functions, methods of operation, and care of the various forms of tillage, seeding, and harvesting machinery. Special attention is given to plows, harrows, seeders and drills, corn and Irish potato planters, cultivators and weeders, mowers and rakes, potato diggers, spraying machines, and vehicles.

Farm Motors.—A study of farm power, water power, horse powers, windmills; water, air, and oil cooled internal-combustion

engines—stationary, portable and tractors—using gas, gasoline, naphtha, kerosene or crude oil as fuel; steam engines —stationary and traction, in their relation and application to farm work. (*Freshman year; Class* 1 *hour, Laboratory* 2 *hours; Credit* 2 *hours.*)

AGRICULTURAL ENGINEERING II*a.*—*Buildings, Roads, Irrigation and Drainage.*—Such topics as the construction of farm residences, barns and other farm buildings; the laying out of roads and fields; underdrainage; and irrigation plants will be considered, and the students will be given practice in drawing plans and writing specifications. (*Senior year;* 3 *hours.*)

AGRICULTURAL EDUCATION

Professor Vernon
Professor McQuarrie

AGRICULTURAL EDUCATION I*a*—*Methods of Teaching Agriculture.*—A special course of lectures in methods of presenting agricultural subjects. It will include materials and laboratory usage. (*Senior Year;* 1 *hour.*)

AGRICULTURAL EDUCATION II*b.*—*Extension Teaching.*—A course of lectures covering the history, methods, purposes, and results of extension teaching. (*Senior Year;* 2 *hours.*)

AGRICULTURAL SEMINAR.—Subjects will be arranged on the approval of the Dean. (*Freshman Year;* 1 *hour.*)

HORTICULTURE

Professor Floyd

Horticulture is applied to the cultivation of useful and ornamental garden plants and orchard fruits. These are the plants most intimately associated with the private life of the home. In a sub-tropical climate unusual opportunities for practical effort and interesting study are presented. The wonderful variety of plants, the peculiar problems involved in their growth and development, and the accomplishments of those who have given time and labor to the solution of those problems, offer inviting fields for study and experimentation. Both the practical and the æsthetic tendencies may be cultivated.

The department with its orchard, garden, laboratory, and library offers fine opportunity for instruction, experiment, and research.

HORTICULTURE A*b*.—*Elements of Horticulture.*—A study of varieties and culture requirements of our principal fruits and vegetables; location of orchards and gardens with reference to soils, climate, and markets; protection from insects and diseases; harvesting and marketing; styles of decorative planting adapted to home and school. (*Eleventh Grade, Practice High School, Teachers College; 3 hours.*)

HORTICULTURE I*a*.—*Plant Propagation.*—Study and practice in propagation by means of division, cutting, layering, budding, and grafting; seed selection, storing, and testing, and the fundamental physiological processes. (*Freshman year; 2 hours.*)

HORTICULTURE II*b*.—*Greenhouse Management.*—This includes the construction, heating, planting, and care of greenhouses, veranda greenhouses, the growing of ornamentals, and forcing of vegetables. (*Freshman year; 2 hours.*)

HORTICULTURE III.—*Trucking.*—This course includes a study of the vegetables adapted to Florida, the seasons in which they are grown, cultural methods, fertilizing, irrigating, packing, and marketing. (*Sophomore year; 2 hours.*)

HORTICULTURE IV*a*.—*Citrus Culture.*—This embraces a study of suitable soils for citrus groves, their preparation, planting, cultivation, fertilization, selection of varieties, and the use of cover crops. (*Junior year; 3 hours.*)

HORTICULTURE V*b*.—*Citrus Harvesting and Marketing.*—This includes methods of picking, handling, washing, drying, packing, shipping, and storing citrus fruits. Attention will also be given to identifying the leading commercial varieties and judging by the use of the score card. (*Junior year; 2 hours.*)

HORTICULTURE VI*a*.—*Insects and Diseases of Citrus Fruits.*—A study of the injurious insects, and of important physiological and fungus diseases and their treatment. (*Senior year; 3 hours.*)

HORTICULTURE VII*a*.—*Deciduous Fruits.*—A study of the growing of peaches, plums, pears, persimmons, grapes, pecans, etc., the varieties adapted to the State, their planting, cultivation, diseases, and insect enemies. (*Junior year; 3 hours.*)

HORTICULTURE VIII*b*.—*Plant Breeding.*—Cross pollination and hybridization of plants, improvement by selection, breeding for special qualities, with field work and a study of the methods of successful breeders, are included. (*Junior year; 3 hours.*)

HORTICULTURE IX*a*.—*Forestry*.—The principles of forestry, forest cropping, protecting the home wood lot, use of Florida woods, varieties of timber trees, and the influences of the forests on the other industries of the State. (*Junior or Senior year; 3 hours.*)

HORTICULTURE X*b*.—*Landscape Gardening*.—The principles underlying the various styles of landscape gardening, plants suitable for planting, improvement of the home grounds, making more attractive school and public grounds, are some of the topics studied. (*Senior year; 2 hours.*)

HORTICULTURE XI*b*.—*Development of American Horticulture*.—An historical study of the development of American Horticulture. (*Junior or Senior year; 2 hours.*)

ANIMAL HUSBANDRY AND DAIRYING

Professor Willoughby

ANIMAL HUSBANDRY

Animal Husbandry includes subjects relating to the domestic animals, their history, classification, and judging; breeding, selection, and improvement: feeding, care, and management; the production and marketing of beef, pork, and other animal products; and the prevention and treatment of ordinary diseases of farm animals.

Live stock raising commands a steady income and is a most valuable aid in maintaining soil fertility. Since this industry will become an important factor in the general prosperity of the State, the instruction is being broadened and equipment enlarged as rapidly as funds will permit. The underlying principles are applicable to all parts of America, and additional special instruction is given for southeastern conditions.

ANIMAL HUSBANDRY A*a*.—*Elements of Animal Husbandry*.—Brief study of types and breeds of farm animals, with some judging practice; principles of breeding, feeding, and management; production of meat, milk, and poultry. (*Practice High School, Teachers College, Twelfth Grade, 3 hours.*)

ANIMAL HUSBANDRY I.—*Types and Breeds of Animals*.—The various types and classes of farm animals; practice in score card and comparative judging; history and utility of the leading breeds. Horses, mules, and swine will be studied in the first

semester; cattle, sheep, and goats in the second. Animals upon the College Farm will be used for judging purposes, and occasional trips will be made to nearby stock farms and stables. (*Freshman year; 2 hours.*)

ANIMAL HUSBANDRY II*a*.—*Animal Feeding*.—The relation of plants to animal life; digestion and assimilation, the formation of animal tissues from nutrients in feeds; feed analyses, digestion coefficients, and feeding standards; practice in compounding and balancing rations for various farm animals under different conditions. (*Sophomore year; 3 hours.*)

ANIMAL HUSBANDRY III*b*.—*Animal Breeding*.—Principles underlying the breeding of animals, including heredity, variation, environment, natural and artificial selection; application of breeding principles to the foundation and management of a breeding herd; value of pedigrees and performance records. (*Sophomore year; 3 hours.*)

ANIMAL HUSBANDRY IV*a*.—*Beef Production*.—Practical methods in beef production, including selection of feeders, feeding, and management of beef cattle, finishing and marketing, slaughter and packing-house methods. Brief consideration of same subjects in mutton production will be included. (*Junior year; 2 hours.*)

ANIMAL HUSBANDRY V*b*.—*Swine Production*.—Location and equipment of a hog farm, breeds of swine suited to the South, raising young stock; growing feeds for grazing and fattening, feeding and managing the herd; marketing and slaughtering, curing meats on the farm. (*Junior year; 2 hours.*)

ANIMAL HUSBANDRY VI*a*.—*Animal Hygiene*.—Elements of anatomy and physiology; care and training of young animals, prevention of disease, disinfection, sanitation; symptoms and treatment of common sporadic diseases of animals. (*Junior year; 3 hours.*)

ANIMAL HUSBANDRY VII*b*.—*Animal Diseases*.—Symptoms and treatment of contagious and infectious diseases; simple surgical operations for the farm, castration, dehorning; properties and action of medicines suitable for farm use; occasional clinics as opportunity is offered. (*Junior year; 3 hours.*)

ANIMAL HUSBANDRY VIII*a*.—*Poultry Culture*.—Location and construction of houses and runs; the principal breeds of poultry, with judging of best specimens obtainable; methods of breeding,

incubation and brooding; egg production; feeding and marketing poultry; management of flock and treatment of diseases. (*Senior year; 2 hours.*)

ANIMAL HUSBANDRY IX*b*.—*Seminar.*—Special topics in animal industry, including essays and reports; preparation of articles for agricultural papers and answers to local problems; monograph and bulletin work. (*Senior year; 2 hours.*)

ANIMAL HUSBANDRY X*a*.—*Animal Conformation.*—Detailed study of form and characteristics of animal breeds and types, including measurements and relations of structure with special reference to utility. (*Elective for Juniors, Seniors, and Graduates; 2 hours.*)

ANIMAL HUSBANDRY XI*b*.—*Animal Nutrition.*—Advanced work in the principles of animal nutrition, including digestion, metabolism, calorimetry, utilization of nutrients for various purposes. (*Prerequisite* II*a; Elective for Juniors, Seniors, and Graduates; 2 hours.*)

ANIMAL HUSBANDRY XII*a*.—*Breeding History.*—Advanced work in the history of breeds and breeders; tabulation of pedigrees; principles of thremmatology. (*Prerequisite* III*b; Elective for Juniors, Seniors, and Graduates; 2 hours.*)

ANIMAL HUSBANDRY XIII*b*.—*Poultry Practice.*—Advanced study and practice in the feeding and management of poultry; principles of incubation; development of embryo and chick; brooder methods, broiler production, caponizing; advanced judging work. (*Prerequisite* VIII*a; elective for Seniors and Graduates; 2 hours.*)

DAIRYING

Dairying includes the production of milk, its composition and testing; sanitary handling and marketing; the manufacture of butter, cheese, and ice cream; factory management and accounting.

The opportunities in the South for supplying dairy products at good prices are practically unlimited, while under proper management the cost of production is lower than in other sections. It is believed this industry will enlarge as its possibilities become better understood, thus saving for the citizens of Florida the large sums that are now being sent to other States for dairy products.

DAIRYING I*a*.—*Dairy Testing.*—Secretion, composition, and

properties of milk; testing milk and its products by the Babcock method, lactometer, and acidmeter; moisture tests for butter; scoring dairy products. (*Sophomore year; 2 hours.*)

DAIRYING II*b*.—*Farm Buttermaking.*—Methods of creaming, operation and care of cream separators; ripening cream and use of starters; churning, manufacturing, and marketing butter. (*Sophomore year; 2 hours.*)

DAIRYING III*a*.—*Dairy Farming.*—Locations suitable for dairy farming; construction of sanitary barns, dairy houses, silos; selection of breeds, feeding and management of the dairy herd, testing and herd records; pastures, soiling crops, and silage; marketing dairy products. (*Senior year; 2 hours.*)

DAIRYING IV*b*.—*City Milk Supply.*—Methods of producing sanitary milk, transportation and marketing, city milk inspection; Pasteurization and care of milk in the home; score cards for dairy and milk depots; milk and cream contests. (*Senior year; 2 hours.*)

DAIRYING V.—*Dairy Manufactures.*—Advanced work in making butter, cottage and Cheddar cheese, fermented milks, ice cream, and various market products; creamery management and accounting. (*Prerequisites, Dairying Ia and IIb; elective for Juniors, Seniors, and Graduates; 2 hours.*)

OTHER DEPARTMENTS

In order to avoid repetition, detailed descriptions of the required and elective subjects in other departments of the College of Agriculture are not printed here. The number of the page on which any desired subject appears will be found in the Index at the end of the catalogue.

MIDDLE COURSE IN AGRICULTURE

For the convenience and accommodation of those who cannot meet the requirements for entrance to the Freshmen year, or who may not wish to pursue a four-year college course and yet desire to obtain thorough training in practical and scientific agriculture, a two-year course is offered. The course is not designed to supplant or in any way to be a substitute for the regular college course as outlined above.

Entrance Requirements.—The entrance requirements for admission to the Middle Course are:

English	2 units
Mathematics	2 units
History	1 unit
Elective	3 units
	8 units

These requirements are equivalent to the work completed in the tenth grade or junior high schools. Students must be at least sixteen years of age to be admitted.

Title.—The title of Graduate in Farming (G.F.) will be conferred upon students who satisfy the entrance requirements and complete the Middle Course in Agriculture.

Those who cannot satisfy these entrance requirements may be admitted to the Middle Course upon showing a good knowledge of the common school branches, and will be awarded a certificate for the work done.

MIDDLE COURSE

Leading to the Title of Graduate in Farming

First Year

Names of Courses	NATURE OF WORK	Hours Per Week
(First Semester)		
Agronomy A	Elements of Agronomy	3
Agronomy I	Soil Physics	2
Animal Husbandry A	Elements of Animal Husbandry	3
Agricultural Engineering I	Farm Machinery	2
Agricultural Seminar		1
*Library Work		R
**Military Drill		R
Elective		7
		18
(Second Semester)		
Agronomy I	Soil Physics	2
Horticulture A	Elements of Horticulture	3
Agricultural Engineering I	Farm Motors	2
Agricultural Seminar		1
*Library Work		R
**Military Drill		R
Elective		10
		18

*A total of 16 actual hours of Library Work required.
**Attendance upon Military Drill is required.

Second Year

NAMES OF COURSES	NATURE OF WORK	HOURS PER WEEK
(First Semester)		
Agronomy III	Field Crops	3
Horticulture I	Plant Propagation	2
Horticulture III	Trucking	2
Animal Husbandry I	Types and Breeds of Animals	2
Animal Husbandry VIII	Poultry Culture	2
**Military Drill		R
Elective		7
		18
(Second Semester)		
Agronomy II	Fertilizers	3
Agronomy V	Rural Law and Farm Accounts	3
Horticulture III	Trucking	2
Animal Husbandry I	Types and Breeds of Animals	2
**Military Drill		R
Elective		8
		18

Elective Studies:

(First Semester)		
Horticulture IV	Citrus Culture	3
Horticulture VI	Insects and Diseases of Citrus Fruits	3
Horticulture VII	Deciduous Fruits	3
Horticulture IX	Forestry	3
Animal Husbandry II	Animal Feeding	3
Animal Husbandry IV	Beef Production	2
Animal Husbandry VI	Animal Hygiene	3
Dairying I	Dairy Testing	2
Dairying III	Dairy Farming	2
Agricultural Engineering II	Buildings, Roads, Irrigation and Drainage	3
(Second Semester)		
Agronomy IV	Forage Crops and Grasses	2
Agronomy VI	Farm Management	2
Horticulture II	Greenhouse Management	2
Horticulture V	Citrus Harvesting and Marketing	2
Horticulture VIII	Plant Breeding	3
Horticulture X	Landscape Gardening	2
Horticulture XI	Development of American Horticulture	2
Animal Husbandry III	Animal Breeding	3
Animal Husbandry V	Swine Production	2
Animal Husbandry VII	Animal Diseases	3
Dairying II	Farm Buttermaking	2
Dairying IV	City Milk Supply	2
Agricultural Education II	Extension Teaching	2

NOTE.—Students shall choose from these elective studies, from other courses, or from the Practice High School of the Teachers College, a sufficient number to make a total of not less than sixteen nor more than eighteen hours per week. Choice of electives must be approved by the Dean.

**Attendance upon Military Drill is required.

SHORT COURSES IN AGRICULTURE

J. J. Vernon, M. S. A., Director

Practically all of the agricultural colleges of the United States have found short courses necessary in order to reach a large class of young farmers and prospective farmers. It has seemed unwise to withhold from this deserving class of wealth producers the advantages of the equipment and instruction generously provided by the Government and State appropriations Men who have completed a high school course are fitted to enter the regular college course. In the Middle and Short Courses the same advantages are thrown open to those who cannot enter the Long course, and the results obtained indicate the wisdom of the step. Since the value of such courses has been satisfactorily demonstrated the courses outlined below are offered, designed to meet the varying needs of the farmer.

Certificates.—Certificates will be granted to those who complete any of the Short Courses.

ONE-YEAR COURSE IN AGRICULTURE

This course will meet the needs of those who can spend only one year at school. The only requirement for admission is a good knowledge of the common school branches.

NAMES OF COURSES	NATURE OF WORK	HOURS PER WEEK
(First Semester)		
Agronomy A	Elements of Agronomy	3
Agronomy I	Soil Physics	2
Agronomy III	Field Crops	3
Horticulture I	Plant Propagation	2
Horticulture III	Trucking	2
Horticulture IV	Citrus Culture	3
Horticulture VI	Insects and Diseases of Citrus Fruits	3
Horticulture VII	Deciduous Fruits	3
Animal Husbandry A	Elements of Animal Husbandry	3
Animal Husbandry I	Types and Breeds of Animals	2
Animal Husbandry II	Animal Feeding	3
Animal Husbandry IV	Beef Production	2
Animal Husbandry VI	Animal Hygiene	3
Animal Husbandry VIII	Poultry Culture	2
Dairying I	Dairy Testing	2
Dairying III	Dairy Farming	2
Agricultural Engineering I	Farm Machinery	2
Agricultural Engineering II	Buildings, Roads, Irrigation and Drainage	3
Agricultural Seminar		1
*Military Drill		R

*Attendance upon Military Drill is required.

Names of Courses	NATURE OF WORK	Hours Per Week
(Second Semester)		
Agronomy I	Soil Physics	2
Agronomy II	Fertilizers	3
Agronomy IV	Forage Crops and Grasses	2
Agronomy V	Rural Law and Farm Accounts	3
Agronomy VI	Farm Management	2
Horticulture A	Elements of Horticulture	3
Horticulture II	Green-house Management	2
Horticulture III	Trucking	2
Horticulture V	Citrus Harvesting and Marketing	2
Horticulture X	Landscape Gardening	2
Animal Husbandry I	Types and Breeds of Animals	2
Animal Husbandry V	Swine Production	2
Animal Husbandry VII	Animal Diseases	3
Dairying II	Farm Buttermaking	2
Dairying IV	City Milk Supply	2
Agricultural Engineering I	Farm Motors	2
Agricultural Seminar		1
*Military Drill		R

Note.—Students shall select not less than sixteen nor more than eighteen hours per week, except on approval of the Dean.

FOUR-MONTH SHORT COURSES IN AGRICULTURE FOR FARMERS

The work of each semester of the One-Year Course outlined above has been so planned as to form of itself a well rounded course of study which can be pursued to great advantage by those who are unable to spend more than four months at the University. Each of these Four-Month Short Courses, one of which begins on September 23, 1914, and the other on February 3, 1915, should appeal to practical farmers who wish to increase their productive power, to young men who expect to become farmers, and to those who are turning from other lines of work in order to possess land and obtain the advantages of country life.

Military Drill is not required of those who take only one of these courses, but is required of those who take both during the same scholastic year. Under "Types and Breeds of Animals," Horses, Mules, and Swine are studied in the first course; Cattle, Sheep, and Goats in the second.

TEN-DAY SHORT COURSE IN AGRICULTURE FOR FARMERS

Beginning January 12, 1915 and ending January 22, 1915.

The Ten-Day Farmers' Short Course in Agriculture is offered to meet the needs of those who for any reason cannot pursue a

*Attendance upon Military Drill is required.

longer course. It is especially suited to two classes: First, busy farmers of all ages who, recognizing their needs for better preparation, earnestly desire more knowledge of scientific agriculture in order to render more effective the practical knowledge they have already gained; and second, ambitious young men who are compelled to drop out of school and yet desire to devote a short time to special preparation for their lifework upon the farm.

There are no age limits and no educational requirements for entrance to the Farmers' Short Course.

The course will consist of lectures, laboratory work, and field observation and demonstration. Trips of inspection will be made to large truck and stock farms in the vicinity of the University, and successful farmers will be called before the classes occasionally for the purpose of explaining their methods.

The laboratory equipment, the thoroughbred stock, and the farm used in the regular courses will be available for instruction in the Short Courses. The Agricultural Experiment Station, located at the University, will afford opportunity for observation and inquiry. Special care has been taken that the Farmers' Short Course should be arranged throughout to meet the needs and suit the conditions of the practical farmer.

Subjects for the Farmers' Short Course in Agriculture will be selected each year from the following list in accordance with the special needs of the students:

Principles of Agriculture.
Soils.
Soil Laboratory.
Fertilizers.
  a. Chemical.
  b. Experimental.
  c. Practical.
Field Crops.
  a. General.
  b. Special.
  c. Experimental.
Crop Judging.
Agricultural Engineering.
  a. Farm Machinery.
  b. Farm Motors.
  c. Buildings, Fences and Roads.
  d. Drainage and Irrigation.
Plant Propagation.
Citrus Fruits and Citrus Culture.
Trucking.
  a. Crops.
  b. Marketing.
  c. Protection.
Types and Breeds of Live Stock.
Poultry Raising.
Stock Judging.
Animal Breeding.
Feeds and Feeding.
Dairying.
  a. Home Dairy.
  b. Feeding, Care and Management of the Dairy Herd.
Injurious Insects.
Plant Diseases.
Farm Bacteriology.
Farm Chemistry.
Library Research.

Expenses.—The necessary expenses for the Farmers' Short Course for those who board and room at the University are as follows:

Board, room, heat and light for eleven days	$ 6.00
Laundry and incidentals (estimated)	1.00
Tuition	0.00
Total	$ 7.00

The rooms in the dormitories of the University are supplied with the necessary furniture, but each student is required to bring with him sufficient bedding for his own use.

The necessary expenses for the Farmers' Short Course for those who board and room in Gainesville are as follows:

Board, room, etc.	$ 8.00
Laundry and incidentals (estimated)	1.00
Tuition	0.00
Total	$ 9.00

The Ten-Day Short Course in Agriculture will be open to Corn Club Boys, but all boys under sixteen years of age will be required to secure room and board in Gainesville. Through the ministers of Gainesville accommodations have been pledged for the Corn Club Boys in the homes of church members.

AGRICULTURAL MEETINGS

The Dean of the College of Agriculture is authorized by the President of the University to extend a cordial invitation to all Agricultural societies or similar organizations in the State to use the College of Agriculture as the place for their meetings.

Some of the meetings held recently at the College include:

Seventh Annual Convention of the Florida Division of the Farmers' Educational and Co-operative Union, July 16 and 17, 1913.

Fourth Annual Citrus Seminar, under auspices of the University Extension Division, October 13 to 16, 1913.

Second Annual Convention of the Florida State Live Stock Association, December 16-18, 1913.

CORRESPONDENCE COURSES

The Legislature of 1909 authorized instruction in agriculture in the public schools of Florida, and, therefore, all who choose farming in the future will have an opportunity of gaining some training designed to fit for life upon the farm. Few who are

now engaged in agricultural pursuits have had such an opportunity. Recognizing this, the College is striving in every way possible to carry its benefits to every section of the State. By means of correspondence courses it hopes to reach a large number who have heretofore been unable to gain both scientific knowledge and practical training.

Correspondence courses are not as effective as resident study, but they are far better than no educational advantages. They lack the personal factor of the instructor, and most of the benefits of laboratory work and illustrative equipment. On the other hand, with ambitious and industrious persons, such courses develop independence of thought and effective individuality of action.

Registration for any of the courses offered may be made at any time during the year. The work may be pursued as rapidly or as slowly as other duties permit. To cover office expenses a registration fee of $1.00 will be charged for each course. The instruction in all cases will be free. Those registering for a course will be required to provide themselves with a text-book and to pay the postage on all manuscripts to and from the University.

The courses, it is hoped, will eventually cover all phases of rural activity. Only white persons will be accepted. Colored persons are referred to the Agricultural and Mechanical College for Negroes at Tallahassee.

(A) *For Teachers.*—The Correspondence Course in Agriculture for Teachers begins October 1, 1914, and ends June 1, 1915, and is open to any person connected with or interested in the educational work of the State. It aims to prepare for examinations in elementary agriculture for teachers' certificates, and to fit teachers for giving instruction in nature study and agriculture in the public schools. The work will consist of text-book study and experimental exercises. In order to approximate classroom results, rather elaborate lists of questions, each question embodying in most cases only one idea, will be issued on every lesson. The answers to these questions will be corrected, errors fully explained, and the manuscripts returned.

The course is based upon the text-book adopted by the State Superintendent of Public Instruction. Other necessary literature is furnished by the University free. An outlay of about 50

cents for equipment for experimental exercises will be necessary.

(B) *For Farmers.*—The following courses are offered for 1914-1915:

1. Elementary Agriculture.
2. Soils.
3. Tillage.
4. Drainage and Irrigation.
5. Manures and Fertilizers.
6. Field Crops (General).
7. Field Crops (Southern).
8. Types and Breeds of Live Stock.
9. Dairy Husbandry.
10. Poultry Husbandry.
11. Animal Breeding.
12. Feeds and Feeding.
13. Citrus Fruits and Citrus Culture.
14. Trucking.

Any course in the list may be selected. It is usually best to pursue one course at a time, upon the completion of which another may be started, although a logical order should be followed. A succession of courses covering two or more years affords opportunity to acquire during leisure moments a knowledge of agricultural science.

For further information, address J. J. Vernon, Dean of the College of Agriculture, University of Florida, Gainesville, Florida. Blanks for registration will be sent upon request.

COLLEGE OF ENGINEERING

FACULTY

ALBERT A. MURPHREE, A.M., LL.D.,
President of the University.

J. R. BENTON, B.S., Ph.D.,
Dean of the College of Engineering,
Professor of Physics and Electrical Engineering.

MAJOR E. S. WALKER, U.S.A., Retired,
Professor of Military Science and Assistant Professor of Engineering.

A. J. WIECHARDT, M.E., M.M.E.,
Professor of Mechanical Engineering.

R. W. THOROUGHGOOD, C.E.,
Professor of Civil Engineering.

JAMES M. FARR, A.M., Ph.D.,
Professor of English.

EDWARD R. FLINT, B.S., Ph.D., M.D.,
Professor of Chemistry.

C. L. CROW, M.A., Ph.D.,
Professor of Modern Languages.

H. G. KEPPEL, A.B., Ph.D.,
Professor of Mathematics and Astronomy.

W. S. PERRY, A.B.,
Instructor in Physics and Electrical Engineering.

A. J. STRONG,
Instructor in Mechanical Engineering.

R. R. SELLERS, B.Sc.C.E.,
Instructor in Civil Engineering.

SPECIAL LECTURERS FOR 1913-1914.

F. S. PERHAM,
Contracting Engineer, Jacksonville.

ELBERT FOWLER,
Consulting Engineer, Jacksonville.

A. S. MILLER,
County Engineer, Lake City.

GENERAL STATEMENT

Aim and Scope.—It is the aim of the College of Engineering to furnish such training as will be useful to its graduates in the profession of engineering. The courses of instruction are similar to those offered in other American engineering schools of college grade; and the graduates are prepared to fill successfully such positions as are usually allotted to young engineers.

Scholastic training alone cannot make a competent engineer, any more than it can make a competent physician or lawyer. It can, however, fit a man to enter the profession of engineering; and it is an important element in ultimate success in that profession.

The work of the College of Engineering is divided among courses of study of the following types: (1) courses in the sciences fundamental to the practice of engineering, of which mathematics, chemistry, and physics are the most important; (2) courses in various branches of engineering practice in which those sciences are applied, such as structural engineering, steam and gas engineering, or electrical engineering; (3) courses in practical work, such as mechanic arts, drafting or surveying; and (4) courses contributing primarily to general culture, such as those in English and in Spanish.

Admission.—To gain admission to the Freshman class of the College of Engineering, a candidate must be prepared to offer 16 entrance units, of which 10 are prescribed. Of these 10 units, 3 must be in English, 4 in Mathematics, 1 or 2 in History, 2 or 1 in Science. The remaining 6 must be chosen from among the list of studies given on page 41, but not more than 4 can be from vocational subjects. These requirements are equivalent to the completion of the twelfth grade of the senior high schools, and are fully explained on pages 39 to 46.

Expenses.—See page 34.

Buildings and Equipment.—The principal building and headquarters of the College of Engineering is Engineering Hall. It is a three-story brick building, 122 feet by 73 feet, with a one-story wing for boilers and steam engine laboratory. It provides classrooms and drafting-rooms for all of the engineering departments of instruction, and various special laboratories, such as the hydraulic laboratory, dynamo laboratory, steam engine laboratory, and laboratory for testing materials.

For the shop work, a separate building is used. It is more fully described on page 19.

A part of the work of the College of Engineering coincides with that of the other colleges of the University, and for all such work the same classrooms and laboratories are utilized.

Suitable equipment is available for the courses requiring laboratory work, shop work or field work in surveying, and is described more fully under the departments of instruction pages 110 to 117.

Curricula and Degrees.—Three curricula, each requiring four years, are offered: one in Civil Engineering, one in Electrical Engineering, and one in Mechanical Engineering. They lead to the degrees of Bachelor of Science in Civil Engineering (B. S. C. E.), Bachelor of Science in Electrical Engineering (B. S. E. E.), and Bachelor of Science in Mechanical Engineering (B. S. M. E.), respectively.

The Freshman year is the same for all engineering students; the Sophomore year is the same for electrical and mechanical engineering students. The work in chemistry, English, Spanish, mathematics and physics is the same for all engineering students throughout the curriculum, and in part coincides with that provided for students in the College of Arts and Sciences. All engineering students take some work in drafting, shop practice, and surveying; but the time devoted to these subjects varies in the different curricula.

Requirements for Degrees for Students Admitted Before Session 1913-14.—The regulations printed below went into effect with the school year of 1913-14. Students previously admitted to the College of Engineering will be held to the requirements for degrees in force when they entered.

ENGINEERING CURRICULUM

Freshman Year

For All Engineering Students

Names of Courses	NATURE OF WORK	*Hours Per Week	
Descriptive Geometry		2	2
Descriptive Geometry Problems		1	1
English I	Composition and Rhetoric	3	3
Mathematics I	Higher Algebra, Analytic Geometry	3	3
Mathematics II	Spherical Trigonometry, Calculus	1	1
Mechanical Drawing	Drawing and Lettering	2	2
Military Science I	Infantry Drill Regulations, Small Arms Firing Regulations	1	1
Physics I	Mechanics, Heat, Acoustics, Optics	3	3
Physics II	Laboratory Work to accompany Physics I	2	2
Wood Working	Carpentry, Wood Turning, Wood Carving, Furniture Construction	3	3
		21	21

CIVIL ENGINEERING CURRICULUM

Leading to the degree of Bachelor of Science in Civil Engineering

Sophomore Year

Names of Courses	NATURE OF WORK	*Hours Per Week	
Chemistry I	Inorganic Chemistry	3	3
Chemistry II	General Laboratory Chemistry	2	2
Mathematics III	Differential and Integral Calculus	3	3
Military Science II	Field Service Regulations, Manual of Guard Duty	1	1
Physics III	Electricity and Magnetism	3	3
Railroads I	Curves and Earthwork	0	3
Spanish I	Elementary Spanish	3	3
Surveying I	Elementary Surveying	6	0
Surveying II	Topographic and Hydrographic Surveying	0	3
		21	21

*The first column gives the hours per week for the first semester, the second column those for the second semester. In counting hours, each actual hour of laboratory, drafting, shop, or field work is counted as one-half hour.

Junior Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Electrical Engineering Ia	Elementary General Course	3	0
Graphic Statics I	Elementary Graphics; Roofs	0	2½
Hydraulics I	Elements of Hydraulics	0	3
Machine Drawing		1½	1½
Mathematics IV	Solid Analytic Geometry and Calculus	2	2
Mechanics I	Analytic Mechanics	4	0
Mechanism	Kinematics of Machinery	2	2
Municipal Engineering I	Roads and Pavements	2	0
Railroads II	Preliminary and Final Location	3	0
Spanish II		3	3
Strength of Materials		0	4
Surveying III	Higher Surveying	0	2½
		20½	20½

Senior Year

Contracts and Specifications		1	1
English VIII	Technical Essays	1	1
Graphic Statics II	Girders and Bridges	2½	0
Hydraulics II	Applications of Hydraulics	3	0
Mechanics II	Analytic Mechanics	4	0
Municipal Engineering II	Water Supply	0	5
Municipal Engineering III	Disposal of Wastes; Concrete, Plain and Reinforced	3	0
Structural Engineering	Theory and Design of Bridges and Buildings	4½	4½
Bacteriology or Geology	General Elementary Course	0	5
Elective		0	3
		19	19½

*The first column gives the hours per week for the first semester, the second column those for the second semester. In counting hours, each actual hour of laboratory, drafting, shop, or field work is counted as one-half hour.

ELECTRICAL ENGINEERING CURRICULUM

Leading to the degree of Bachelor of Science in Electrical Engineering

Sophomore Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Chemistry I	Inorganic Chemistry	3	3
Chemistry II	General Laboratory Chemistry	2	2
Forge and Foundry Work		1½	1½
Machine Drawing		1½	1½
Mathematics III	Differential and Integral Calculus	3	3
Mechanical Technology	Lectures on Forge and Foundry Practice	½	½
Mechanism	Kinematics of Machinery	2	2
Military Science II	Field Service Regulations, Manual of Guard Duty	1	1
Physics III	Electricity and Magnetism	3	3
Spanish I	Elementary Spanish	3	3
		20½	20½

Junior Year

Electrical Engineering I*a*	Elementary General Course	3	0
Electrical Engineering I*b*	Direct Current Machinery	0	3
Elementary Machine Design		3	3
Heat Engines		3	0
Hydraulics I	Elements of Hydraulics	0	3
Machine Shop I		0	3
Mathematics IV	Solid Analytic Geometry and Calculus	2	2
Mechanics I	Analytic Mechanics	4	0
Pattern Making		3	0
Spanish II		3	3
Strength of Materials		0	4
		21	21

Senior Year

Contracts and Specifications		1	1
Electrical Engineering II	Alternating Currents; Transmission; Electric Lighting	7	7
Electrical Engineering III	Telegraph and Telephone	2	2
English VIII	Technical Essays	1	1
Graphic Statics I	Elementary Graphics; Roofs	0	2½
Graphic Statics of Machinery		2	0
Heat Engines		0	3
Mechanics II	Analytic Mechanics	4	0
Elective		3	3
		20	19½

*The first column gives the hours per week for the first semester, the second column those for the second semester. In counting hours, each actual hour of laboratory, drafting, shop, or field work is counted as one-half hour.

MECHANICAL ENGINEERING CURRICULUM

Leading to the degree of Bachelor of Science in Mechanical Engineering

Sophomore Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Chemistry I	Inorganic Chemistry	3	3
Chemistry II	General Laboratory Chemistry	2	2
Forge and Foundry Work		1½	1½
Machine Drawing		1½	1½
Mathematics III	Differential and Integral Calculus	3	3
Mechanical Technology	Lectures on Forge and Foundry Practice	½	½
Mechanism	Kinematics of Machinery	2	2
Military Science II	Field Service Regulations, Manual of Guard Duty	1	1
Physics III	Electricity and Magnetism	3	3
Spanish I	Elementary Spanish	3	3
		20½	20½

Junior Year

Electrical Engineering Ia	Elementary Course	3	0
Elementary Machine Design		3	3
Heat Engines		3	3
Hydraulics I	Elements of Hydraulics	0	3
Machine Shop I		0	3
Mathematics IV	Solid Analytic Geometry and Calculus	2	2
Mechanics I	Analytic Mechanics	4	0
Pattern Making		3	0
Spanish II		3	3
Strength of Materials		0	4
		21	21

Senior Year

Contracts and Specifications		1	1
English VIII	Technical Essays	1	1
Gas Engines		0	3
Graphic Statics I	Elementary Graphics; Roofs	0	2½
Graphic Statics of Machinery		2	0
Machine Design		3	3
Machine Shop II		3	3
Mechanics II	Analytic Mechanics	4	0
Valve Gears		1	0
**Electives		6	7½
		21	21

*The first column gives the hours per week for the first semester, the second column those for the second semester. In counting hours, each actual hour of laboratory, drafting, shop, or field work is counted as one half hour.

**Subject to the approval of the Professor of Mechanical Engineering.

DEPARTMENTS OF INSTRUCTION

CIVIL ENGINEERING

Professor Thoroughgood
Major Walker
Mr. Sellers

The purpose of the Department is to teach the student the theory, and the application of the principles underlying Civil Engineering; and thus to fit him for immediate and profitable usefulness in the field and office work of his profession.

Instruction is given by means of assigned recitations from standard text-books, combined with laboratory, field, and drawing-room exercises, for the purpose of emphasizing the practical side of the subject.

For the field work in Surveying and Railroads, the Department is amply supplied with the necessary equipment, consisting of levels, transits, plane tables, rods, tapes, etc.

In the Library will be found files, as well as the current issues, of all the leading Civil Engineering and allied technical periodicals. The reference library in Civil Engineering has been greatly enlarged recently by the purchase of books from a fund set aside for that purpose. It now contains works of reference in every branch of the subject.

SURVEYING I.—Recitations on the use of the chain, compass and level, the determination of areas, and instrumental adjustments. Field work in chaining, leveling, compass and transit surveys, and adjustments of instruments. Drawing-room work in the plotting of field notes, lettering, and map drawing. (*Recitations,* 3 *hours a week: field and drawing-room work,* 2 *periods a week, of* 3 *hours each. Prerequisite: Mathematics* II.)

SURVEYING II.—Recitations on the use of the stadia, plane table, sextant, and tape in base line work. Field problems in the use of the stadia, plane table, and sextant; a complete stadia traverse. Plotting of stadia notes. (*Recitations,* 1 *hour a week; field and drawing-room work,* 1 *period a week of* 4 *hours. Prerequisite: Surveying* I.)

SURVEYING III.—Recitations and field work. Precision leveling, city and hydrographic surveying: determinations of merid-

ian, latitude, and time. (*Recitations,* 1 *hour a week; field work,* 1 *period a week of* 3 *hours. Prerequisite: Surveying* II.)

Railroads I.—Recitations on the simple, compound, reversed, vertical and transition curve, and earthworks. Field problems in curve layout. Drafting room work in the paper location of a railroad. (*Recitations,* 2 *hours a week*; *field and drawing-room,* 1 *period a week, of two hours. Prerequisite: Surveying* I.)

Railroads II.—Field and drawing-room work in the preliminary and final location of a railroad. Estimates of earthwork and cost; plotting of profiles. (*Field and drawing-room,* 2 *periods a week, of* 3 *hours each. Prerequisite: Railroads* I.)

Graphic Statics I.—Recitations and drawing-room exercises in the computations of forces, and the plotting of diagrams in elementary graphics, and roofs. (*Recitations,* 1 *hour a week; drafting,* 1 *period a week of* 3 *hours. Prerequisites: Mathematics* I *and* II.)

Graphic Statics II.—Recitations and drawing-room work in the graphic analysis of girders and bridges. (*Recitations,* 1 *hour a week; drafting,* 1 *period a week of* 3 *hours. Prerequisite: Graphic Statics* I.)

Hydraulics I.—A short general course on the principles of hydraulics with special reference to their application in engineering. The subjects considered are: Stability of dams, strength of pipes and tanks, stability of ships, flow in pipes and in open channels, impulse and resistance of fluids, measurement of pressure, velocity and discharge. (*Lectures,* 2 *hours a week; laboratory,* 1 *period a week of* 2 *hours. Prerequisites: Physics* I *and* II*; Mathematics* III.)

Hydraulics II.—The application of the principles of Hydraulics I to the solution of such engineering problems as the improvement of rivers and harbors, construction of canals, disposal of flood waters, water power development, and drainage and irrigation. (*Lectures* 2 *hours a week; laboratory,* 1 *period a week of* 2 *hours. Prerequisite: Hydraulics* I.)

Municipal Engineering I.—Recitations on the theory, design and maintenance of roads, streets, and pavements. (*Recitations,* 2 *hours a week. Prerequisite: Railroads* II.)

Municipal Engineering II.—Recitations and laboratory exercises on the theory and design of a water supply system. Drawing-room computations and plotting for an actual system. (*Reci-*

tations, 3 hours a week; drawing-room, 1 period a week of 2 hours. Prerequisite: Hydraulics I.)

MUNICIPAL ENGINEERING III.—Sewerage and sewerage disposal engineering. Design of sewerage systems. Drafting room work in the design of a system. Theory of concrete and reinforced concrete. (*Recitations, 4 hours a week; drawing-room, 2 periods a week of 2 hours each. Prerequisite: Municipal Engineering* II.)

CONTRACTS AND SPECIFICATIONS.—A study of the contract in its relation to the engineer. Specifications. (*Recitations, 1 hour a week.*)

STRUCTURAL ENGINEERING.—Theory and computations of stresses in the various types of bridges and buildings. Theory and design of highway and railroad bridges. Theory of cantilever and continuous bridges. Drawing-room designs. (*Recitations, 3 hours a week; designing and drawing, 1 period a week of 3 hours. Prerequisite: Mechanics* I.)

ELECTRICAL ENGINEERING

Professor Benton
Mr. Perry

Instruction in this department is planned so as to lay equal stress on classroom work, of theoretical nature, and on laboratory work, of practical nature. For the latter, a well-equipped dynamo laboratory is provided, which is fully described on page 23.

The following courses are given:

ELECTRICAL ENGINEERING I*a*.—A short elementary course in general Electrical Engineering. Text-book to be used in 1914-1915: Norris's Introduction to the Study of Electrical Engineering. (*One semester only; 2 recitations and 1 laboratory exercise of 2 hours per week.*)

ELECTRICAL ENGINEERING II.—Dynamo-electric machinery, alternating currents, electrical transmission of power, and electric lighting. Text-books to be used in 1914-15: Franklin and Esty's Elements of Electrical Engineering; Franklin and Esty's Dynamo Laboratory Manual. (*Required of Seniors in the Electrical Engineering course; 4 recitations and 3 laboratory exercises of 2 hours each per week.*)

ELECTRICAL ENGINEERING III.—Telegraph and telephone engineering. (*Required of Seniors in the Electrical Engineering*

course; 1 recitation and 1 laboratory exercise of 2 hours per week.)

Electrical Engineering IV.—A brief laboratory course on electrical machinery. (*1 laboratory exercise of 2 hours per week.*)

MECHANICAL ENGINEERING, DRAWING, AND MECHANIC ARTS

Professor Wiechardt
Mr. Strong

The instruction in this department follows theoretical and practical lines. In the drafting-room and various shops, the best practical methods are always kept in mind. System, accuracy and neatness are insisted upon everywhere. Engineering magazines and catalogues of the best machinery are accessible to the students, who are encouraged to read them. While acquainting the student with practical methods, the aim is to produce engineers of independent thought and original power. In every possible way the student is encouraged to think for himself—to make improvements where improvements are possible, and thus to keep abreast with the progress of the times.

MECHANICAL ENGINEERING

Mechanism.—*The Kinematics of Machinery.*—This includes an investigation of link work, construction of gears and cams, belt and pulley drive, trains of mechanism, the velocity ratio and directional relation of the moving parts of various machines, etc. The text is supplemented by drawing exercises in the construction of gear teeth, cams, and motion diagrams. (*Required of all Electrical and Mechanical Engineering students; Sophomore year; 4 actual hours. Prerequisites: Descriptive Geometry Problems and Mechanical Drawing.*)

Valve Gears.—This course consists of the graphical study of the different types of steam engine valve gears by means of the Zeuner and other diagrams; valve setting, and steam distribution obtained by the usual types. (*Required of Mechanical Engineering students; Senior year; 2 actual hours. Prerequisite: Heat Engines.*)

Graphic Statics of Machinery.—This course includes the graphic determination of the forces actuating machinery and the mechanical efficiency of several machines and machine parts. It

takes into account the effect of friction of pins, sliding pieces, screws, chains, ropes, and similar pieces. (*Required of Electrical and Mechanical Engineers; Senior year; first semester; 4 actual hours. Prerequisite: Graphic Statics* I.)

MECHANICS Ia.—*Analytic and Applied Mechanics.*—This comprises a study of the laws of force, friction, equilibrium of fluid pressure, inertia, centrifugal force, kinetic and potential energy, etc. Problems are also assigned, illustrating the practical application of these laws to cranes, derricks, pumps, boilers, engines, dynamos and other machinery. (*Required of all Engineering students; first semester; Junior year; 4 hours. Prerequisite: All Sophomore Mathematics.*)

STRENGTH OF MATERIALS.—This comprises an investigation of the strength of materials used in the construction of machinery and engineering structures; an analysis of the stresses in bridges, roof trusses, and machinery; and a study of the mechanical properties of iron, steel, timber, cement, and other materials. The text is supplemented by laboratory tests on specimens of the various materials. (*Required of all Engineering students; second semester; Junior year; 4 hours. Prerequisite; Mechanics* Ia.)

MECHANICS IIb.—*Analytic and Applied Mechanics.*—A continuation of Mechanics Ia. (*Required of all Engineering students; second semester; Senior year; 4 hours. Prerequisite: Mechanics* Ia.)

HEAT ENGINES.—This includes a study of the steam engine and the laws of thermodynamics; the indicator card; and the losses involved in the conversion of one form of energy into another. (*Required of Mechanical and Electrical Engineering students; the former, Junior year; the latter, first semester of Junior and second semester of Senior year; 3 hours. Prerequisites: All Sophomore Mathematics, Physics, and Chemistry.*)

GAS ENGINES.—This includes a study of the modern internal combustion engine, gas producers, and the utilization in them of liquid fuels. (*Required of Mechanical Engineering students; second semester; Senior year; 3 hours weekly. Prerequisite: Heat Engines.*)

DESCRIPTIVE GEOMETRY.—*Projections.*—This includes methods of representing points, lines, surfaces and solids in space by their projections; their intersections with each other and the careful solution of many original problems on the drawing board. (*Required of all Engineering students; Freshman year; 2 hours.*)

Descriptive Geometry Problems.—*A companion course to Descriptive Geometry.*—It includes free-hand drawings, and a further drill in making neat, accurate drawings, mechanically. The latter deals exclusively with the solution of numerous problems of the intersection of lines, planes and solids, and is taught with especial reference to developing originality in thinking and reasoning. (*Required of all Engineering students; Freshman year; 2 actual hours. Prerequisite: Descriptive Geometry.*)

Mechanical Drawing.—This comprises the use of the ordinary drawing instruments, the solution of geometrical problems, perspective drawing, isometric drawing, lettering, and some mechanical drawing from machine parts. (*Required of all Engineering students; Freshman year; 4 actual hours.*)

Machine Drawing.—*Interpreting and Reading Drawings.*—The student is required to make true working drawings, showing all the necessary dimensions and the delineation of the parts to a proper scale. He is given a set of detailed drawings from which to make an assembly drawing, or vice versa. A number of tracings and blueprints are also required. (*Required of Electrical and Mechanical Engineering students in Sophomore year, of Civil Engineering students in Junior year; 3 actual hours.*)

Elementary Machine Design.—This includes the design and proportioning of such machine parts as bolts, riveted joints, keys and gibs, toothed gearing, belt transmissions, shafts, journals, bearings and rod joints. (*Required of Mechanical and Electrical Engineering students; Junior year; 6 actual hours. Prerequisites: Machine Drawing and Mechanism.*)

Machine Design.—This comprises the design of machines or parts of machines to perform certain functions. From a set of specifications and a manufacturer's catalogue, plans must be drawn up for the installation of machines. A certain amount of structural drawing, relative to power plant installations, is also taken up. (*Required of Mechanical Engineering students; Senior year; 6 actual hours. Prerequisite: Elementary Machine Design.*)

MECHANIC ARTS

Wood Working.—*Carpentry and Wood Turning.*—First is given an elementary course in laying out work, and in the use of the ordinary hand tools, such as saws, chisels and planes. The

student is next taught the use of the turning lathe, turning by himself a series of patterns; then he is taught the care and use of wood-working machinery, such as the rip-saw, cut-off saw, band-saw, and planer. (*Required of all Engineering students; first semester; Freshman year; 6 actual hours.*)

Cabinet Work.—*Elementary Wood Carving and Furniture Construction.*—Herein is applied the skill, knowledge, and experience obtained in the first semester's work, and each student will be required to design and construct a piece of furniture, or other approved article involving carving, turning or joinery as a passing piece. (*Required of all Engineering students; second semester; Freshman year; 6 actual hours. Prerequisite: Wood Working.*)

Forge I*a*.—Practice work is first given so as to develop proficiency in the use of the hammer. The student then makes articles of intrinsic value, such as foundry tools, hammers, cold chisels, lathe tools, turning chisels, drawknives, and screw-drivers. He acquires skill in forging, welding, dressing, tempering and annealing. (*Required of Electrical and Mechanical Engineering students; first semester; Sophomore year; 6 actual hours. Prerequisite: Cabinet Work.*)

Foundry I*b*.—Foundry practice will be given; text-book or lectures. (*Required of Electrical and Mechanical Engineering students; second semester; Sophomore year; 3 actual hours. Prerequisite: Forge Ia.*)

Patternmaking.—This course includes instruction in glueing up work, finishing smoothly with the necessary draft, allowing for shrinkage, and similar details of the patternmaker's craft. It is taught by the student making small patterns and core boxes from a system of carefully arranged and progressive exercises. These will be followed by the construction of patterns for such small machines as are designed in the drafting room for construction in the shops, at least as far as the development of the work will permit. (*Required of Mechanical and Electrical Engineering students; first semester; Junior year; 6 actual hours. Prerequisites: Cabinet Work, Machine Drawing, and Foundry Ib.*)

Machine Shop I*b*.—The student is thoroughly drilled in the practical. Simple tasks in turning, boring, grinding, planing, and milling are first given, followed by the more difficult duties. (*Re-*

quired of Mechanical and Electrical Engineering students; second semester; Junior year; 6 actual hours. Prerequisite: Pattern-making.)

MACHINE SHOP II.—This is a continuation of the shop work of the previous year. It consists of the more intricate and difficult tasks. All of this work is on actual machinery or parts thereof, and is of intrinsic value. (*Required of Mechanical Engineering students; Senior year; 6 actual hours. Prerequisite: Machine Shop Ib.*)

MECHANICAL TECHNOLOGY.—A course of Lectures in Mechanical Technology, to accompany Forge I*a* and Foundry I*b*. (*Required of Electrical and Mechanical Engineering students; Sophomore year; 1 hour.*)

OTHER DEPARTMENTS

In order to avoid repetition, detailed descriptions of the required and elective subjects in other departments of the College of Engineering are not printed here. The number of the page on which any desired course appears will be found in the Index at the end of the catalogue.

SHORT COURSE IN MECHANIC ARTS

A. J. Wiechardt, M. E., M. M. E., Director

This course is designed for students who desire to attain proficiency in drafting, machine design, and shop practice, without pursuing a regular course in engineering. It does not lead to any degree. The studies shown in the following table are required:

First Year

Names of Courses	Nature of Work	*Hours Per Week	
Mechanical Drawing		2	2
Machine Drawing		3	3
English I	Composition and Rhetoric	3	3
Mathematics A and B	Solid Geometry, Plane and Spherical Trigonometry	4	4
Military Science I	Infantry Drill Regulations, Small Arms Firing Regulations	1	1
Mechanic Arts	16 actual hours	8	8
		21	21

Second Year

Chemistry I	Inorganic Chemistry	3	3
Elementary Machine Design		2	2
Mechanism	Machine Design	3	3
Mathematics I	Higher Algebra, Analytic Geometry	3	3
Military Science II	Field Service Regulations, Manual of Guard Duty	1	1
Physics I	Mechanics, Heat, Acoustics, Optics	3	3
Physics II	Laboratory Work to Accompany Physics I	2	2
Mechanic Arts	12 actual hours	6	6
		23	23

*In counting hours, each actual hour of laboratory, shop, or field work is counted as one half hour. First column, number of hours in first semester; second column, number in second semester.

COLLEGE OF LAW

FACULTY

ALBERT A. MURPHREE, A.M., LL.D.,
President of the University.

THOS. W. HUGHES, LL.M.,
Dean and Professor of Law.

HARRY R. TRUSLER, A.M., LL.B.,
Professor of Law.

CLIFFORD W. CRANDALL, B.S., LL.B.,
Professor of Law.

SPECIAL LECTURERS FOR 1913-14

CHIEF JUSTICE THOS. M. SHACKLEFORD, LL.D.,
JUSTICE JAMES B. WHITFIELD,
JUSTICE R. F. TAYLOR,
JUSTICE W. A. HOCKER,
JUSTICE R. S. COCKRELL,
All of the Supreme Court of Florida.

HON. W. B. SHEPPARD,
U. S. Dist. Judge.

HON. J. T. WILLS,
Circuit Court Judge.

HON. FRED C. CUBBERLY,
Ex-U. S. District Attorney.

HON. THOS. W. FIELDING,
Referee in Bankruptcy.

HON. ROBT. E. DAVIS,
City Attorney, Gainesville.

PROF. HARVEY W. COX, Ph.D.,
University of Florida.

GENERAL STATEMENT

In 1891, the American Bar Association declared that in its opinion it was a part of the highest duty and interest of every civilized State to make provision, when necessary, for maintaining schools of law and for the thorough legal education of all who are licensed to practice law. Feeling with its full force the soundness of this doctrine and desiring to discharge this duty on the part of the State, the State Board of Education and the Board of Control provided for the opening of the College of Law in the University of Florida in September, 1909. The advantages to accrue to the State from having, as a part of its educational system, a thorough and systematic course of instruction in the common law, with special consideration of the peculiarities and exceptions applicable in Florida, are many and evident.

It was the purpose of the Board of Control to establish a law school which, by the quality of its work and the character of its equipment, would merit and command the confidence and support of the bench and bar of the State and would draw within its walls the young men who will constitute the future bar of Florida. That the hopes of accomplishing these results were well founded and that gratifying progress towards these ends has been made, are shown by the number and character of those who have availed themselves of the advantages offered by the College of Law.

Building.—For a description of the home of the College, see page 20.

Requirements for Admission.—Graduates and matriculates of colleges and universities and applicants who have completed a high school course of four years will, upon presentation of proper credentials to that effect, be admitted to the College, without examination as to preliminary education, as candidates for a degree. Other applicants for admission as regular students will be required to stand an entrance examination. For the prescribed and elective subjects that this examination will cover, see pages 39 to 46. *No applicant under nineteen years of age will be admitted.*

Special Students.—Persons over twenty-one years of age who are not able to qualify as regular students may be admitted as "Special Students" upon presenting satisfactory evidence that they have received such training as will enable them to make profitable use of the opportunities offered in the College of Law. If the entrance conditions are removed not later than the open-

ing of the first semester of the Senior year, such students may, by special vote of the Faculty, become regular students and candidates for a degree.

ADVANCED STANDING.—Attorneys at law who have been admitted to practice in the courts of this State and who comply with the above entrance requirements will be admitted to the Senior class without examination.

No work in law done in other institutions will be accepted towards a degree, unless the applicant passes satisfactorily the examinations held in the subjects in the Junior year of this College, or unless, by special vote of the Faculty, credit is given towards Senior standing without examination for such work. In no case will credit be given for work not done in residence at an approved law school.

EXAMINATIONS.—The last week of each semester is devoted to examinations covering the work of the semester. These examinations are in writing and are rigid and searching, but ARE NOT NECESSARILY FINAL. To be considered, prima facie, to have satisfactorily completed a subject, the student must obtain a grade of at least 75 per cent. During the last week of the second year any candidate for a degree may be required to pass an examination in any or all subjects given in the course and attain a minimum average grade of 75 per cent in all subjects in order to be recommended for a degree.

THE UNIVERSITY PRACTICE COURTS.—Thoroughly organized practice courts are regular features of the course of instruction in the second year. Weekly sessions of the courts are held, over which Judges of the Practice Court preside. The object of the course in the Practice Court is to give the student practical instruction in pleading and practice at law and in equity and experience in the preparation and trial of cases. The work is arranged as follows:

First.—Cases arising upon prepared statements of fact are assigned to the second year students, upon which they are to determine what proceedings to bring and how to bring them, issue, serve, and return process, prepare the pleadings and bring the case to an issue on a question of law. Each student must take part in at least one case at law and one in equity. The case is first heard on the sufficiency of the form and the structure of the pleadings, and when these are approved the issue of law is argued

and decided, the students acting as attorneys on each side drawing the order, judgment or decree they deem themselves entitled to.

Second.—In the second class of cases in the Practice Court actual controversies are arranged and assigned for trial in the Circuit Court as issues of fact. After determining what action to bring, the students assigned to the case are required to issue the proper process and prepare and file the necessary pleadings, subpoena the witnesses, select the jury, examine and cross-exine the witnesses, and argue the case to the jury. Each student is required to participate in the trial of at least one common-law, one equity, and one criminal case and must take part in carrying one of each to the Supreme Court for review.

The work of the Practice Court in Criminal Pleading and Procedure is conducted by Dean Hughes; that in Equity Pleading and Procedure by Professor Trusler; and that in Common Law Pleading and Procedure by Professor Crandall.

The Law Library.—Law books are the working tools of the practicing lawyer. To teach the student how to use these tools, how to use the digests, encyclopedias, and reports, is as much the work of the law school as to teach him the general principles of the law.

The College of Law was fortunate in being able to open its doors with a good working library and now has on its shelves the following books: three sets of the Florida Supreme Court Reports, with digest; the Session Laws of Florida from 1822 to 1913, except from 1828 to 1834; McClellan's Digest and Duval's Compilation of the Laws of Florida; Revised Statutes of 1892 and the General Statutes of 1906; the Northwestern, Southwestern, Northeastern, Southeastern, Atlantic, Pacific, and Southern Reporters; the American Decisions, American Reports and American State Reports, with digests; the Lawyers' Reports Annotated, with digests; the United States Supreme Court Reports, with digests; the New York Common Law and Chancery Reports, with digests; the New York Court of Appeals Reports, the Reports of the Supreme Courts of Michigan and Massachusetts and the New Jersey Equity Reports to the Reporters; the Reprint of the English Reports, the Encyclopedia of Law and Procedure and more than two hundred of the leading text-books and books of reference. The Legislature of 1911 ap-

propriated one thousand dollars for the purchase of new books, and recently this money was expended in buying the Alabama State Report, the Illinois State Reports, the New Jersey Law State Reports, the Decennial, and many text-books.

Books.—The text-books used in the College of Law will, in most cases, be found in the law library, but it will be necessary for students to provide themselves with books for their daily use. Nearly all of the books are standard texts and will form a nucleus of the student's future library.

The Marshall Debating Society.—It is important that those who study law and intend to engage in its practice should give attention to the subject of public speaking. To suppose that excellence in public speaking and debating is a gift of nature only and not the result of patient and persistent effort, is a mistake. Believing in the truth of these statements, the students in the College of Law met early the first year and organized a society that would secure to its members practice in debating and public speaking and experience in arguing legal questions, as well as drill in parliamentary law. The society was fittingly named "The Marshall Debating Society," in honor of the memory of the distinguished Southern jurist, John Marshall. The membership and work in the society are limited to students in the College of Law, but the Faculty give all possible assistance and encouragement.

University Privileges.—The advantages of the other colleges of the University are open to such students in the College of Law as desire and are able to accept them. Courses in Constitutional and Political History, International Law, Political Economy, Logic, Rhetoric and English Composition are particularly recommended to law students. No extra charge will be made for such courses, but students in the College of Law will be permitted to take them only with the consent of the Law Faculty and of the professors concerned.

Degree.—The degree of Bachelor of Laws (LL.B.) is conferred upon those students who satisfactorily complete the courses of study. Students admitted to advanced standing may, if they do satisfactorily the work prescribed, receive the degree after one year's residence, but in no case will the degree be granted unless the candidate is in actual residence during all of the second year.

Admission to the Bar.—The graduates of the College of Law are licensed by the Supreme Court, without examination, to

practice in all the Courts of Florida upon presenting their diplomas, duly issued by the proper authorities, and upon furnishing satisfactory evidence that they are twenty-one years of age and of good moral character.

EXPENSES.—See page 34.

COURSE OF INSTRUCTION

The course of instruction in the College of Law extends through two years of thirty-five weeks each, exclusive of vacations. The academic year is divided into two semesters, the first having eighteen weeks and the second seventeen.

The purpose of the College is to educate its students by the study of jurisprudence and to acquaint them with the foundation principles of the common law. "The ability to think clearly, to reason closely, to appreciate distinctions quickly, to investigate thoroughly, to generalize accurately, and to state his conclusions tersely, are prime requisites of the safe counselor." To secure for the student this power should be the constant effort of both student and Faculty.

The method of instruction has been planned with these ends in view. This is largely by the use of text-books and selected cases. Each case is carefully studied by the student, and in the classroom he is required to analyze it, giving in his own language a clear and concise statement of the essential facts, the issues involved in the case, the law governing it, and the reasoning of the court for the conclusion reached. This practice tends "to greater thoroughness in reading, greater care in reasoning, and greater accuracy on the part of the student in the art of expression."

In connection with this case work, the student studies a well written text-book on the subject under consideration. This gives him a systematic summary of the same, more detailed information concerning the application of the law in particular instances, and an outline of the exceptions to and limitations upon the general principles considered in the cases.

Particular stress is placed on the statutory modifications of the common law in Florida. This is true in every subject in the curriculum; but it is especially emphasized in Pleading, Practice and Evidence, as the course of study is designed to instruct the student thoroughly in the peculiarities of substantive law and procedure in Florida, so that he will be able to enter upon the practice understandingly at once.

With these ends in view, the following course of study has been prepared:

FIRST YEAR

FIRST SEMESTER

CONTRACTS.—The nature of contract; offer and acceptance; form and consideration; capacity of parties; reality of consent; legality of object; operation of contract. Text-books: Willis on Contracts and Huffcut and Woodruff's Cases on Contracts. (5 *hours. Dean Hughes.*)

ELEMENTARY LAW AND ELEMENTARY REAL PROPERTY.—Study of the elementary principles of the law as given in Books I, II and III of first edition of Robinson's Elementary Law and the first six chapters of Hopkins on Real Property. (4 *hours. Professor Crandall.*)

DOMESTIC RELATIONS.—This course considers thoroughly the law of husband and wife, parent and child, guardian and ward, infants, persons *non compos mentis* and aliens. Text-books: Long's Domestic Relations and the Statutes of Florida. (2 *hours. Professor Crandall.*)

TORTS.—History and definitions; elements of torts; conflicting rights; mental anguish; parties to tort actions; remedies; damages; conflict of laws; method of discharge. Text-books: Burdick on Torts and Burdick's Cases on Torts. (3 *hours. Professor Trusler.*)

CRIMINAL LAW.—Nature of crime; common-law and statutory offenses; mental element in crime; insanity, intoxication, infancy, coercion, ignorance and mistake as bearing on exemption from criminal liability; necessity; justification; agency; consent; condonation; contributory acts; principals; accessories; classification and study of specific crimes; former jeopardy; State and Federal jurisdiction. Text-books: Hughes on Criminal Law and the Statutes of Florida. (2 *hours. Dean Hughes.*)

SECOND SEMESTER

SALE OF PERSONAL PROPERTY.—Sale and contract to sell; statute of frauds; illegality; conditions and warranties; delivery; acceptance and receipt; vendor's lien; stoppage in transitu; bills of lading; remedies of seller and buyer. Text-book: Tiffany on Sales. (1 *hour. Professor Trusler.*)

Torts.—Exhaustive study of particular torts, including among others, false imprisonment; malicious prosecution and abuse of process; conspiracy; slander and libel; trespass; conversion; deceit; nuisance; negligence Text-books: Burdick on Torts and Burdick's Cases on Torts. (*2 hours. Professor Trusler.*)

Agency.—Definitions and divisions; purposes for which the relation may be created and how; who may be principal or agent and evidence of the existence of the relation; ratification; delegation of authority by agent; termination, nature and extent, construction and execution of the authority; rights, duties and liabilities of agent, principal and third persons, the one to the other; particular classes of agents. Text-books: Mechem's Outlines of Agency and Mechem's Cases on Agency. (*2 hours. Dean Hughes.*)

Common Law Pleading.—Definition and classification of actions; proceedings in an action; analysis of the declaration; Stephen's Rules of Pleading. Text-book: Andrews' Stephen's Common Law Pleading, the Statutes of Florida and the Supreme and Circuit Court Rules in Common Law Actions in Florida. (*3 hours. Professor Crandall.*)

Equity Jurisprudence I.—History and Definition; jurisdiction; general maxims; equitable estates, interests and primary rights, including a study of trusts, the powers, duties and liabilities of trustees; mortgages; equitable liens; assignments. Text-books: Eaton on Equity and Selected Cases. (*2 hours. Professor Trusler.*)

Real Property II.—Text-books: Hopkins on Real Property and the Statutes of Florida. (*2 hours. Professor Crandall.*)

Criminal Procedure.—Jurisdiction and venue; arrests, searches and seizures; extradition; preliminary examination, bail and commitment; modes of accusation; the form of accusation; pleading, proof; variance; verdict and judgment; proceedings after verdict; evidence; habeas corpus. Text-books: Hughes's Criminal Procedure and the Statutes of Florida. (*1 hour. Dean Hughes.*)

Brief Making and the Use of Law Books.—Where to find the law; how to use statutes and decisions; how to find the law; the trial brief; the brief on appeal and its preparation. Text-books: Brief Making and the Use of Law Books. (*1 hour. Professor Crandall.*)

SECOND YEAR

FIRST SEMESTER

EQUITY PLEADING.—Nature and object of pleadings in equity; parties to a suit in equity; proceedings in a suit in equity; bills in equity; the disclaimer; demurrers and pleas in equity; replication and answers in an equitable suit. Text-books: Shipman's Equity Pleading, Rules of the Circuit Court in Chancery in Florida, and the Statutes of Florida. (*2 hours. Professor Trusler.*)

EVIDENCE.—Rules as to admission and exclusion of evidence; judicial notice; parole evidence rule; burden of proof and the right to open and close; competency and examination of witnesses; production of documents, persons, and things; direct examination, cross examination, and redirect examination. Text-books: Hughes on Evidence, and the Statutes of Florida. (*3 hours. Dean Hughes.*)

BAILMENTS AND CARRIERS.—Nature and classification of bailments; rights and liabilities of the parties; innkeepers, carriers of goods as to liability, discrimination, compensation, lien; Carriers of passengers as to duty to accept, accommodations, ticket, ejection, personal injuries; actions against carriers. Text-book: Goddard's Outlines of Bailments and Carriers. (*1 hour. Professor Crandall.*)

NEGOTIABLE INSTRUMENTS.—Law Merchant; definitions and general doctrines; contract of the maker, acceptor, certifier; drawer; indorser, vendor, accommodater, assurer; proceedings before and after dishonor of negotiable instruments; absolute defenses; equities; payments; conflict of laws. Text-books: Bigelow on Bills, Notes and Checques, the Negotiable Instrument Act of Florida, and selected cases. (*2 hours. Professor Crandall.*)

EQUITY JURISPRUDENCE II.—Accident, mistake, and fraud: penalties and forfeitures; priorities and notice; bona fide purchasers; estoppel; election: satisfaction and performance; conversion; specific performance; injunction; reformation; cancellation; cloud on title; ancillary remedies. Text-books: Eaton on Equity and selected cases. (*2 hours. Professor Trusler.*)

ORGANIZATION OF AND PROCEEDINGS IN THE COURTS OF FLORIDA IN CIVIL ACTIONS.—

a. *In General.*—Disqualification, resignation, and removal of

judges; judge's power in vacation; judge ad litem; parties to suits at law; locality and consolidation of actions; joinder of causes of action; rule days; commencement of suits at common law; appearances, defaults and judgments upon default; pleadings at law; witnesses and evidence; jurors; judgments and executions; motions for new trial and in arrest of judgment; lis pendens; appellate proceedings at law and in probate matters; limitation of actions.

b. *Supreme Court.*—Statutory powers; members of the court; its terms, record, clerk, seal, decisions, and reports.

c. *Circuit Court.*—Statutory powers and duties of judges; terms; records and dockets to be kept by the clerk; seal and records.

d. *Circuit Court in Chancery.*—Its power in vacation; locality of action; process, its service and return; bill, demurrer, plea and answer; practice and evidence; masters in chancery; decrees; rehearings and appeals; injunctions; ne exeat; divorce and alimony; partition of property; quieting titles; disability of minors and married women; liens.

e. *Statutory Jurisdiction of Circuit Court.*—Ejectment; reestablishing lost papers; adoption of children; eminent domain; court commissioners.

f. *County Court.*—Jurisdiction; terms; clerk; seal; records; appeals; rules of practice.

g. *County Judge's Court.*—General powers; bonds; clerk; seal; probate powers; as justice of the peace; forcible entry and detainer.

h. *Courts of Justices of the Peace.*—General provisions; jurisdiction; proceedings before, at, and after trial; proceedings on appeal.

i. *Special Statutory Proceedings at Law.*—Attachment; garnishment; forcible entry and detainer; replevin; statutory liens; landlord and tenant.

j. *Extraordinary Legal Remedies.*—Habeas corpus; quo warranto; prohibition.

Text-books: Shipman's Common Law and Equity Pleading, General Statutes of Florida, decisions of Florida Supreme Court and the Common Law and Equity Rules of Practice of the Circuit and Supreme Courts of Florida. (*2 hours a week throughout the year. Professor Crandall.*)

THE UNIVERSITY PRACTICE COURT.—(*One hour a week throughout the year. Dean Hughes, Professor Trusler, and Professor Crandall.*)

FLORIDA CONSTITUTIONAL LAW.—Declaration of rights; legislative, executive, and judicial departments of government; suffrage and eligibility; census and apportionment; counties and cities; taxation and finance; homestead and exemptions; married women's property; education; public institutions; miscellaneous provisions. Text-books: The Constitution, Statutes and Judicial Decisions of Florida. (1 *hour. Professor Trusler.*)

UNITED STATES CONSTITUTIONAL LAW.—General principles; distribution of governmental powers; congress; the chief executive; the judiciary; police powers; eminent domain; checks and balances; guarantee of republican government, civil rights; political privileges; guarantees in criminal cases; impairment of contractual obligations; municipal corporations. Text-books: Cooley's Principles of Constitutional Law and Cooley's Constitutional Limitations. (2 *hours. Professor Trusler.*)

BROOM'S LEGAL MAXIMS.—A reading course running throughout the year. (*Dean Hughes.*)

SECOND SEMESTER

JURISDICTION OF THE UNITED STATES COURT.—Under the federal constitution; jurisdiction of the different federal courts; ancillary and appellate jurisdiction; bankruptcy; admiralty suits; federal questions; removal from state to federal courts, habeas corpus. Text-books: Hopkin's Judicial Code and selected cases. (1 *hour. Professor Trusler.*)

WILLS.—Definition, nature and kinds of wills; a devisable estate; who may make a will; error, fraud, undue influence, mistake; who may take by will; formal requisites of wills; revocation; re-publication; by what law wills are governed; construction and effect of wills; lapse and substitution; rights and liabilities of devisees and legatees; descent and distribution. Text-books: Rood on Wills and the Statutes of Florida. (2 *hours. Professor Crandall.*)

LEGAL ETHICS.—A consideration of the profession of the law in its relation to society, embracing the duties the lawyer owes to the commonwealth, to the court, to his professional brethren, and to his clients. Text-books: Warvelle's Legal Ethics and the

Code of Ethics adopted by the American Bar Association. (1 *hour. Dean Hughes.*)

Executors and Administrators.—When necessary; appointment and qualification; acceptance or renunciation; foreign and interstate administration; powers, duties, and liabilities of executors and administrators; inventory; assets of estate; insolvent estates; distribution; accounting and allowances. Text-books: Croswell's Executors and Administrators and the Statutes of Florida. (2 *hours. Professor Trusler.*)

Damages.—General principles; nominal, compensatory, exemplary, and liquidated damages; interest; value; pleading and practice; breach of contracts for sale of goods; actions against carriers; death by wrongful act; wrongs affecting real property; damages in tort action; breach of marriage promise. Text-book: Cases on Damages, selected from Florida Reports. (1 *hour. Professor Trusler.*)

Partnership.—Definitions and classifications; what constitutes a partnership; contract of partnership; firm name and good will; capital of firm; partnership property; rights and liabilities of partners among themselves and as to third persons; actions; dissolutions; limited partnerships. Text-book: Shumaker on Partnership, and selected cases. (1 *hour, Dean Hughes.*)

Private Corporations.—Nature of a corporation; creation and citizenship of corporations; defectively organized corporations; promoters and corporations; powers and liabilities of corporations; corporation and the State; dissolution of corporations; membership in corporations; management of corporations; creditors, their rights and remedies; foreign corporations. Text-books: Elliott on Corporations and the Statutes of Florida. (3 *hours. Dean Hughes.*)

TEACHERS COLLEGE AND NORMAL SCHOOL

FACULTY

ALBERT A. MURPHREE, A.M., LL.D.,
President.

JOHN A. THACKSTON, Pd.M., Ph.D.,
Dean, Professor of Education, and High School Inspector.

HARVEY W. COX, A.M., Ph.D.,
Professor of Philosophy.

L. W. BUCHHOLZ, A.M.,
Professor of Elementary Education, Methods and Supervision.

JAS. M. FARR, A.M., Ph.D.,
Professor of English Language and Literature.

EDWARD R. FLINT, Ph.D., M.D.,
Professor of Chemistry.

J. R. BENTON, A.B., Ph.D.,
Professor of Physics.

C. L. CROW, M.A., Ph.D.,
Professor of Modern Languages.

JAS. N. ANDERSON, M.A., Ph.D.,
Professor of Ancient Languages.

H. S. DAVIS, Ph.D.,
Professor of Zoology and Bacteriology.

J. J. VERNON, B.Agr., M.S.A.,
Professor of Agriculture.

H. G. KEPPEL, A.B., Ph.D.,
Professor of Mathematics.

A. J. WIECHARDT, M.E., M.M.E.,
Professor of Mechanical Engineering and Drawing.

W. L. FLOYD, M.S.,
Professor of Horticulture.

LUTHER LEE BERNARD, A.B., Ph.D.,
Professor of History and Economics.

C. L. WILLOUGHBY, B.Agr.,
Professor of Animal Husbandry and Dairying.

W. S. CAWTHON, A.B.,
Assistant Professor of Mathematics and Science.

W. B. HATHAWAY, A.B., B.D.,
Instructor in Latin, History and English.

W. S. PERRY, A.B.,
Instructor in Physics.

A. J. STRONG,
Instructor in Mechanic Arts.

IRA D. ODLE, B.S.,
Instructor in Botany and Bacteriology.

R. S. BLANTON, A.B.,
Teaching Fellow in Mathematics.

H. S. SAWYER, A.B.,
Teaching Fellow in History.

GENERAL STATEMENT

The Teachers College and Normal School is essentially a professional school. Its main purpose is to train young men for positions in the public school system of the State as teachers, principals, supervisors, or as county and city superintendents of public instruction. Its Review Courses are intended to prepare teachers for the examinations for County and State Certificates. For those not wishing to become teachers it offers courses giving the information about and the insight into modern educational problems that every intelligent citizen should possess.

PEABODY HALL.—Peabody Hall, the home of the College, is a magnificent building, modern in every respect both as to equipment and as to arrangement. A description of it will be found on page 20.

LIBRARY.—The pedagogical library receives many of the best educational journals, and contains the standard books on educational theory, general and special methods, the history of education, psychology, and philosophy. Additions to these are made every year.

PSYCHOLOGICAL LABORATORY.—The Psychological Laboratory (see page 24) affords an excellent opportunity to investigate the laws of the mind. To know these through experiment will give the teacher greater power to direct properly their development in the child.

PEABODY CLUB.—Active membership in this club, a description of which is to be found on page 38, is considered of the utmost importance.

ORGANIZATION.—The Teachers College and Normal School has the following divisions:

(1) Teachers College.
(2) Normal School.
(3) Practice High School.
(4) Correspondence School for Teachers.
(5) State High School Inspection.
(6) Teachers' Employment Bureau.
(7) University Summer School.

STATE CERTIFICATES.—Graduates of the Teachers College and of the Normal School are granted State Certificates without further examination—provided, that one-fifth of their work has been devoted to professional training, and provided further, that during each of the last two years of their course they make a general average of eighty-five on all subjects and do not fall below sixty in any subject. These State Certificates are converted into Life Certificates in the usual way.

TEACHERS COLLEGE

ADMISSION.—The requirements for admission to the Freshman class of the Teachers College are the same as those of the College of Arts and Sciences and may be found in detail on pages 39 to 46, inclusive.

EXPENSES.—See page 34.

DEGREES.—The Teachers College offers courses leading to the degree of Bachelor of Arts in Education and Bachelor of Science in Education.

ELECTIVES.—In order that the graduates of the Teachers College may be well prepared to teach two or three high school subjects, much freedom in the choice of electives is permitted. It is taken for granted that the student will elect the subjects which he hopes to teach and will take advantage of his freedom of choice to become especially proficient in those elected. For a list of elective groups see page 52. For the A.B. degree the major elective work must be chosen in Groups II and III, or Group II or III; for the B.S. degree, from Group IV. In all years the choice of electives must be approved by the Dean and no more than the required numbers shall be chosen without his consent. The foreign language elected by Freshmen must be pursued throughout the Sophomore year.

TEACHING FELLOWSHIPS.—See page 34.

CURRICULUM

Leading to the Degree of Bachelor of Arts or Bachelor of Science in Education

Freshman Year

NAMES OF COURSES	NATURE OF WORK	HOURS PER WEEK
Education NIII	Reviews and Methods of Teaching History, Reading and Geography	4
Education I*a*	Psychology	3
Education II*b*	Methods of Study	
English I	Rhetoric and Composition	3
French I or German I or Spanish I or Latin	Elementary Course Elementary Course Elementary Course	3
Mathematics History I Botany I Chemistry I Agronomy I Physics I Foreign Language	Modern European General Botany General Chemistry General Agriculture General Physics French, German, Spanish or Latin	6
Military Science I		1
		20

Sophomore Year

Education III	Reviews and Methods of Teaching Arithmetic and Grammar	3
Education IV*b*	School Management and Supervision	1½
Military Science II		1
Group II		3 or 6
Group III		3 or 6
Group IV		3 or 6
		17½

Junior Year

Education V*a*	History of Education	3
Education VI*b*	Secondary Education	
Philosophy I*a* and *b*	General Psychology	3
Electives		9
		15

Senior Year

Education VII	Principles and Philosophy of Education	3
Education VIII*a*	Child Study	3
Education IX*b*	Practice Teaching	
Education Special	High School Teachers Course	1
Electives		9
		16

DEPARTMENTS OF INSTRUCTION

EDUCATION

Professor Thackston
Professor Cox
Professor Buchholz

EDUCATION I*a*.—*Psychology*.—An elementary course designed to set forth the main phenomena of mental life, to furnish the student with the concepts and terms which will constantly recur in his further study, and to prepare candidates for the examination on Psychology for the State Certificate. The textbook prescribed from time to time by the State Superintendent of Education will be used in connection with lectures and much reference work to the standard American writers. (*Required of Freshmen; first semester;* 3 *hours.*)

EDUCATION II*b*.—*General Methods*.—This has for its main purpose the application of the laws of psychology, as learned in Education I*a*, to the general methods of study and of teaching. The student will be shown the best methods of study that psychological laws indicate and he will be urged to pattern his own habits of study accordingly. The general principles and methods of teaching will be stressed. (*Required of Freshmen; second semester;* 3 *hours.*)

EDUCATION III.—*Reviews and Methods of Teaching Arithmetic and Grammar*.—During the first semester a thorough review of Arithmetic will be made in order to acquaint the student with the fundamental principles of the subject before the methods, which imediately follow, are given. During the second semester English grammar will be treated in the same way. (*Required of Sophomores;* 3 *hours.*)

EDUCATION IV*b*.—*School Management and Supervision*.—This course is designed to give the practical and theoretical information needed by principals and county superintendents in their supervision of elementary and grammar schools. During the course many practical problems are taken up and fully discussed. Discipline, school and class hygiene, purpose of education, organization and classification, grading and promoting—special plans of promotion being discussed—programs, time tables, report cards, plan and progress books, departmental teaching, exercises and intermissions, the recitation, etc. (*Required of Sophomores; second semester;* 3 *hours.*)

EDUCATION V*a*.—*History of Education.*—This course has two main purposes: First, to lead the student to see and appreciate the good things in the many systems of education studied and to apply them as far as possible in his own work; second, to inspire him with the noble ideals manifested in the lives and works of the great educational leaders, and thus to excite in him greater devotion to his calling. (*Required of Juniors; first semester; 3 hours.*)

EDUCATION VI*b*.—*Secondary Education.*—This course is designed to give insight into the problems of the secondary and high school. Many problems relating to the high schools in this and other Southern States are thoroughly gone over for the purpose of understanding the present situation and planning for better things. The following special topics may be mentioned: Psychology and Pedagogy of Adolescence, High-School Athletics, History of Secondary Education, High-School Courses, comparative study of secondary education in different countries. Lectures and reference work supplement the reading of several texts. (*Required of Juniors; second semester; 3 hours.*)

EDUCATION VII.—*The Principles and Philosophy of Education.*—This course attempts to select from modern psychology and sociology all the facts that will aid the teacher in obtaining a clearer insight into the actual workings of the child's mind in the process of learning. A few of the topics studied are: The brain and nervous system, the place of the body in education, attention, interest, imitation, the social, moral and religious aspects of education. (*Required of Seniors; 3 hours.*)

EDUCATION VIII*a*.—*Child Study.*—The aim of this course is to give the student an insight into the physical development and growth of the child, the meaning of protracted infancy, the origin and development of instincts, development of intellect, heredity, individuality, abnormalities and the application of facts learned to school work, etc. (*Required of Seniors; first semester; 3 hours.*)

EDUCATION IX*b*.—*Practice Teaching.*—Knowledge of the principles, theory, and of the history of education will better fit any teacher for his work, but these without concrete experiences and practice under direction will not give the best results. Realizing this, the course is planned for the purpose of giving this experience under the supervision and watchcare of the professor in charge of the department in which the subject chosen for practice

is taught. This practice teaching will occupy the same position as laboratory work does in the science departments and will have the same proportion of credit. (*Required of Seniors; second semester; 3 hours.*)

Special Courses for High School Teachers.—The following courses are offered by the different departments of the University for the special preparation of high school teachers. Each course will aim to give to the student the teachers' point of view of the subject, and will go over and organize the material that the special subject should cover in the high school course. Attention will be given to the methods of presenting the subjects to a class. The best text-books and reference books will be pointed out, as well as special books and magazines that have recently appeared on the teaching of the subject. In the sciences the student will have the privilege of handling and setting up the apparatus used in making demonstrations before a class. Besides this he will be required to select lists of the most suitable apparatus for high school laboratories. Practice teaching in the Practice High School will be given to students who take these courses. In a word, it is the aim of these courses to fit students to begin their teaching in an efficient and satisfactory manner without having to experiment for a year or two.

These courses are open only to teachers in the Junior, Senior and Graduate classes. Students are required to take the course or courses that deal with the subject or subjects which they are preparing to teach; but none of these courses may be taken except after thorough study in the college classes of the subject or subjects in question.

Education X*a*.—*The Teaching of English.*—A general survey of high school English and the methods of presenting the subject. Text-book, reference reading, observation and practice teaching. (1 *hour; first semester. Professor Farr.*)

Education XI*b*.—*Botany in the High School.*—High School botany from the teacher's standpoint. Apparatus for laboratory will be selected, field trips planned and made, and best text-books pointed out. Text-books and reference reading. (1 *hour; second semester. Professor Floyd.*)

Education XII*a*.—*Methods of Teaching High School Mathematics.*—Text-book, lectures and practice teaching. (1 *hour; first semester. Professor Keppel.*)

EDUCATION XIII*b*.—*High School History*.—Methods and materials used in presenting history to high school pupils. Observation and practice teaching, text-books and reference reading. (1 *hour; second semester. Professor Bernard.*)

EDUCATION XIV*a*.—*Teaching of High School Physics*.—Methods, the selection of proper apparatus, etc. (1 *hour; first semester. Professor Benton.*)

EDUCATION XV*b*.—*High School Chemistry*.—Methods, the selection of proper apparatus, etc. (1 *hour; second semester. Professor Flint.*)

EDUCATION XVI*a*.—*Methods of Teaching German in the High School*.—Lectures and reference reading. (1 *hour; first semester. Professor Crow.*)

EDUCATION XVII*b*.—*Teaching French in the High School*.—Methods and devices; lectures and text-books. (1 *hour; second semester. Professor Crow.*)

EDUCATION XVIII*b*.—*Teaching High School Agriculture*.—Making out suitable courses, selecting apparatus for experimenting, methods of presenting subject. Lectures and reference reading. (1 *hour; second semester. Professor Vernon.*)

OTHER DEPARTMENTS

In order to avoid repetition, detailed description of the other subjects that may be taken by students in the Teachers College is not printed here. The number of the page on which any desired course appears is to be found in the Index at the end of this catalogue.

NORMAL SCHOOL

COURSES AND REQUIREMENTS

The Normal School offers four courses:

Course I.—Spring Review Course.—This course covers both the contents and methods of teaching the subjects required for County and State Certificates, and is designed for those engaged in teaching from four to six months in the year and desirous of renewing or advancing the grade of their certificates.

Course II.—One-Year Course.—This covers the same work as Course I, but is gone over more slowly and may be entered upon at any time during the year. Hours and classes are arranged to suit the special needs of the students.

There are no requirements for admission to either Course I or Course II, and all teachers who can profit by either are welcomed. The character of the work leading to State and Special Certificates is described under Course IV; an outline of the work leading to a County Certificate is given below. The text-books adopted by the State Superintendent of Public Instruction will be used as the basis of instruction.

CURRICULUM, SPRING REVIEW COUNTY CERTIFICATES

NAMES OF COURSES	NATURE OF WORK	HOURS PER WEEK
Agriculture		2
Algebra		4
Arithmetic		4
Civil Government		2
English Composition		2
English Grammar		2
Hygiene		2
Orthography		2
Pedagogy		2
Physical Geography		3
Political Geography		2
Reading		1
United States and Florida History		3

DESCRIPTION OF COURSES OF STUDY

AGRICULTURE, S. R.—An introduction to the study of soils, plants and their common diseases, insects, farm crops, domestic animals, etc. Text-books, laboratory and field work. Methods of teaching agriculture in the rural schools stressed. (*2 hours.*)

ALGEBRA, S. R.—The fundamental operations, simple and simultaneous equations, factoring, fractions, involution and evolution, quadratic equations, progressions, ratio and proportion. This work will be closely correlated with that in arithmetic. (4 *hours.*)

ARITHMETIC, S. R.—A thorough review of arithmetic from both the teacher's and the child's point of view. Common and decimal fractions, denominate numbers, percentage, and other subjects covered by the text-book adopted by the State. Principles and methods of teaching arithmetic. (4 *hours.*)

CIVIL GOVERNMENT, S. R.—Local, town and city, county, State and national governments; and methods of teaching the subject. Practical information stressed, and general interest in government aroused. (2 *hours.*)

ENGLISH COMPOSITION, S. R.—Study of words, sentences, paragraphs, and whole compositions; narration, description, exposition, and argument; much practice in writing. Punctuation and spelling receive attention. Letter-writing. (2 *hours.*)

ENGLISH GRAMMAR, S. R.—Parts of speech; inflection; syntax, structure and analysis of sentences; principles and methods of teaching grammar. (2 *hours.*)

HYGIENE, S. R.—The body; functions and use of the organs. The importance of hygiene and sanitation, and how to keep well and physically efficient stressed. (2 *hours.*)

ORTHOGRAPHY, S. R.—The spelling of common words and best methods of teaching spelling stressed. Correct spelling in all written work demanded. (2 *hours.*)

PEDAGOGY, S. R.—School management, general and special methods of teaching, elementary principles of child nature, school hygiene and sanitation, personality of teacher, relation of school and community, and other practical pedagogical questions. (2 *hours.*)

PHYSICAL GEOGRAPHY, S. R.—Study of the main topics found in the ordinary text-book on the subject. Stress placed on the effects that physical features have on man, commerce, and society. Closely correlated with agriculture. (3 *hours.*)

POLITICAL GEOGRAPHY, S. R.—A thorough review of the geography of the United States and the world. Special attention to Florida and its relations to other States. Instruction

in the use of text-books, maps, globes, industrial products, stereoscope, post-cards and newspapers. (*2 hours.*)

READING, S. R.—Weekly practice in reading to the end that teachers may be able to read well to their classes. Story-telling is introduced in connection with this work. Methods and principles of teaching reading. (*1 hour.*)

UNITED STATES AND FLORIDA HISTORY, S. R.—A thorough review of United States and Florida history; their correlation with geography and literature; methods of teaching the subject. Special attention given to biography and the topic method of study. (*3 hours.*)

Course III.—Two-Year Elementary Professional Course.—This course includes all of the subjects taught in the elementary and rural schools. It gives special attention to methods of teaching, school management, rural problems, and such professional subjects as will make rural and grammar school teachers more efficient. Applicants who hold teachers' certificates, or who have finished the eighth grade of a grammar school, will be admitted to the first year of this course. On the completion of Course III, students will be admitted to the first year of the Regular Four-Year Normal Course.

CURRICULUM, TWO-YEAR ELEMENTARY PROFESSIONAL COURSE

First Year

NAME OF COURSE	NATURE OF WORK	HOURS PER WEEK
Education 2-Yr I	Reviews and Methods of Teaching Political Geography, Reading, U. S. and Florida History	4
English 2-Yr I	Grammar, Composition and Classics	4
History 2-Yr I	Ancient History	4
Mathematics 2-Yr I	Algebra	4
Science 2-Yr I	Physical Geography and Physiology	4

Second Year

Education 2-Yr II	Reviews and Methods of Teaching Arithmetic and English Language	4
Education 2-Yr III	School Management and Rural Problems	4
English 2-Yr II	Composition and Classics	4
Mathematics 2-Yr II	Algebra	4
Science 2-Yr II	Agronomy and Horticulture	3

DESCRIPTION OF COURSES OF STUDY

EDUCATION 2-YR. I.—*Reviews and Methods of Teaching U. S. and Florida History, Reading and Political Geography.*—Thorough and complete reviews of these three subjects are made. The work is broader and more advanced than that of the eighth grade, and is always looked at both from the teacher's and the pupil's points of view. History is studied in the fall, reading in the winter, and geography in the spring, the subject matter being first given and then the methods of presenting it to a class. (4 *hours.*)

EDUCATION 2-YR. II.—*Reviews and Methods of Teaching Arithmetic and English Language.*—Thorough and complete reviews of these subjects are made, and the difficult parts are taken up and fully explained. Methods of teaching are given for each subject after the reviews are completed. Both subjects are made practical and directly helpful. (4 *hours.*)

EDUCATION 2-YR. III.—*School Management and Rural Problems.*—Among the subjects to be discussed are: School organization, classification and discipline; school hygiene, recess, and play; one- and two-teacher rural schools; grading rural schools; rural boys and girls; relation of teacher to child, home, and community.

ENGLISH 2-YR. I.—*Grammar, Composition, and Classics.*—A thorough course in advanced grammar (*twice per week*). Composition, oral and written. At least one written composition every week. Special attention given to narration. Spelling and letter-writing. Classics, College Entrance Requirements and those best suited for the upper grades of the grammar school and the ninth grade of the high school. (4 *hours.*)

ENGLISH 2-YR. II.—*Composition and Classics.*—A text-book in composition used as guide (*twice per week*). Description and narration will receive the major part of the time. Oral and written composition. One written composition each week. Spelling and letter-writing. Classics (*twice per week*) suited to grade and high school work. (4 *hours.*)

HISTORY 2-YR. I.—*Ancient History.*—The major part of the time will be given to the study of the history of Greece and Rome. Special note of hero stories, biography, mythology, and that which appeals to the child in the grades. Reference reading required in connection with the topics of the text-books. (4 *hours.*)

MATHEMATICS 2-YR. I.—*Algebra.*—A beginner's course covering the work through elementary quadratics. (4 *hours.*)

MATHEMATICS 2-YR. II.—*Algebra.*—A thorough eview of algebra to quadratics, then quadratics and the ren. ining part of an ordinary second-year algebra. (4 hours.)

SCIENCE 2-YR. I.—*Physical Geography and Physiology.*—The work in physical geography will be about as outlined in the newer secondary school geographies. The proper correlation of physical with political and commercial geographies—especially necessary for teachers. Laboratory and field work with notes on all observations and experiments. Physiology will be given one semester and will cover a practical course in physiology, sanitation and hygiene. Laboratory work with notes required. (4 *hours.*)

SCIENCE 2-YR. II.—*Agronomy and Horticulture.*—Agronomy will be a study of soils and soil fertility in their relations to plant growth and the underlying principles governing the production of field and forage crops. (*First semester*). The horticulture is a study of varieties and culture requirements of our principal fruits and vegetables; location of orchards and gardens with reference to soils, climate and markets; protection from insects and diseases; harvesting and marketing; styles of decorative planting adapted to home and school. (3 *hours.*)

Course IV.—Regular Four-Year Normal Course. — This course will offer work similar to that of the standard normal schools of this country. Applicants who have finished the first two years of a high school will be admitted to the first year of this course. High school graduates will be allowed to enter the third year. Graduates of the Normal School will be admitted to the Junior class of the Teachers College.

CURRICULUM, REGULAR FOUR-YEAR NORMAL COURSE

First Year

NAMES OF COURSES	NATURE OF WORK	HOURS PER WEEK
English NI	Rhetoric, Composition and Classics	4
History NI	Mediaeval and Modern History	4
Mathematics NI	Plane Geometry	4
Take from 6 to 8 hours of the following:		
Latin NI	Beginner's Course	4
French NI	Beginner's Course	4
Spanish NI	Beginner's Course	4
Science NI	Physics	4
Mechanic Arts NI*a* and NII*b*	Wood Work	3
Agriculture NI	Elements of Agronomy and Horticulture	3
Required		18 to 20

Second Year

NAMES OF COURSES	NATURE OF WORK	HOURS PER WEEK
English NI	American and English Literature and Composition	4
History NI	American History and Civics	4
Take from 11 to 12½ hours of the following:		
Latin NII	Cæsar (4 books) and Composition	4
Mathematics NII	Plane Trigonometry and Solid Geometry	4
French NII	Second Year Course	4
Spanish NII	Second Year Course	4
Agriculture NII	Elements of Animal Husbandry and Agricultural Engineering	3
Science NII	Chemistry	4
Mechanic Arts NIII*a* and NIV*b*	Forge and Foundry Work	4½
Required		19 to 20½

Third Year

Education I*a*	Psychology	3
Education II*b*	Methods of Study	
Education NIII	Reviews and Methods of Teaching History, Geography, and Reading	4
English I	Rhetoric and Composition	3
Take 9 hours of following:		
French I	Elementary Course	3
German I	Elementary Course	3
Spanish I	Elementary Course	3
Latin NIII	Cicero, Composition and Grammar	3
Mathematics	Plane Analytic Geometry and College Algebra	4
Physics I	General Physics	3
Agronomy I	General Agriculture	3
Botany I	General Botany	3
Chemistry I	General Chemistry	3
History I	Modern European	3
Military Science I		1
Required		20

Fourth Year

Education III	Reviews and Methods of Teaching Arithmetic and Grammar	3
Education IV*b*	School Management and Supervision	3
Education V*a*	History of Education	
Education IX*b*	Practice Teaching	1½
Group II		3
Group III		3
Group IV		3
Military Science II		1
Required		17½

*See Groups, p. 52.

DEPARTMENTS OF INSTRUCTION

AGRICULTURE

AGRICULTURE NI.—See Agronomy A*a* and Horticulture A*b*, College of Agriculture.

AGRICULTURE NII.—See Animal Husbandry A*a* and Agricultural Engineering A*b*, College of Agriculture.

EDUCATION

Professor Buchholz

EDUCATION NIII.—*Reviews and Methods of Teaching History, Geography and Reading.*—This course presupposes high school graduation and a good knowledge of the subjects here to be studied. A thorough mastery of the subject matter from the teacher's point of view is made, then the student is shown, and required to reproduce in class, the most psychological and pedagogical and, therefore, most practical methods and principles of teaching each subject. (*Third year;* 4 *hours.*)

ENGLISH

Mr. Hathaway

ENGLISH NI.—*Rhetoric, Composition and Classics.*—The formal rules of rhetoric in so far as they are needed in composition work and the study of the classics. Compositions written every week. Exposition stressed. Spelling and letter-writing. Classics two hours per week. College Entrance Requirements. (*First year;* 4 *hours.*)

ENGLISH NII.—*American and English Literature and Composition.*—Most of the time of this class will be devoted to the study of literature and not to the history of literature. Much reading will be required. Compositions one per week. Argumentation stressed. Spelling and letter-writing. (*Second year;* 4 *hours.*)

FRENCH

Assistant Professor Cawthon

FRENCH NI.—*First Year.*—Pronunciation and reading aloud, dictation and conversation, the auxiliary and regular verbs, commoner irregular verbs, simple constructions and grammar. The reading of easy selections. (*First year;* 4 *hours.*)

FRENCH NII.—*Second Year.*—Work of first year continued. Translations from English to French, grammar and elements of

syntax, short written exercises, dictation, conversation, reading of selections. (*Second year;* 4 *hours.*)

HISTORY

Professor Buchholz and Mr. Sawyer

History NI.—*Mediaeval and Modern History.*—This begins with the time of Charlemagne and comes down to the present time. Mediaeval history will be touched lightly, while stress will be placed upon English history. Text-book and reference reading required. (*First year;* 4 *hours.*)

History NII.—*American History and Civics.*—A general survey from the early discoveries to the present time. The work in Civics will be studied in connection with the history so far as possible. Stress will be laid upon the study of local history and geography; local industries; transportation and communication; organized community life and public health; local, State and national governments. Text-book and reference reading required. (*Second year;* 4 *hours.*)

LATIN

Mr. Hathaway

Latin NI.—*Beginner's Latin.*—A good first-year book will be studied and completed. (*First, second, or third year;* 4 *hours.*)

Latin NII.—*Caesar, Composition and Grammar.*—*Four* books of Cæsar will be carefully read. Prose Composition and Grammar once a week. (*Second, third, or fourth year;* 4 *hours.*)

Latin NIII.—*Cicero, Composition and Grammar.*—Six orations of Cicero. Prose composition and grammar once a week. (*Third or fourth year;* 4 *hours.*)

Latin NIV.—*Virgil, Composition and Grammar.*—Six books of Virgil. Prose composition and grammar once a week. (*Fourth year;* 4 *hours.*)

MANUAL TRAINING

Professor Wiechardt and Mr. Strong

Mechanic Arts NI*a*.—*Wood Work.*—Same as Carpentry and Wood Turning, College of Engineering. See page 115.

Mechanic Arts NII*b*.—*Elementary Wood Carving and Furniture Construction.*—Same as Cabinet Work, College of Engineering. See page 116.

Mechanic Arts NIII*a*.—*Forge Shop.*—Same as Forge I*a*, College of Engineering. See page 116.

MECHANIC ARTS NIV*b*.—*Foundry Practice*.—Same as Foundry I*b*, College of Engineering. See page 116.

MATHEMATICS

Assistant Professor Cawthon and Mr. Blanton

MATHEMATICS NI.—*Plane Geometry*.—The first five books in plane geometry. (*First year; 4 hours.*)

MATHEMATICS NII.—*Solid Geometry and Plane Trigonometry*.—Study of the topics ordinarily covered by standard high schools. (*Second year; 2 hours each.*)

SCIENCE

Assistant Professor Cawthon

*

SCIENCE NI.—*Physics*.—Elements of physics; problems and laboratory work. Carefully kept note-books required. (*First year; 4 hours.*)

SCIENCE NII.—*Chemistry*.—Elementary principles of chemistry; text-book and laboratory work. Carefully kept note-books required. (*Second year; 4 hours.*)

SPANISH

Mr. Hathaway

SPANISH NI.—*First Year*.—Pronunciation and reading aloud, dictation, conversation, auxiliary and regular verbs, irregular verbs, simple constructions, grammar, reading of easy selections. (*First year; 4 hours.*)

SPANISH NII.—*Second Year*.—Work of first year continued. Translations from English into Spanish, grammar, elements of syntax, short written exercises, dictation, conversation, reading of selections. (*Second year; 4 hours.*)

PRACTICE HIGH SCHOOL

The former Sub-Collegiate division of the University has been made a part of the Teachers College and Normal School and its scope has been widened so as to make it a practice and model school for the students of education. Here student-teachers will have opportunity to observe the methods of skilled instructors as well as to practice teaching under guidance the high school subjects in which they are most interested.

*To be appointed.

ADMISSION.—Only graduates of junior high schools, or pupils who have finished work equal to that of the tenth grade, will be admitted. The number admitted to either grade will, furthermore, be limited to from twenty to twenty-five. No pupil will be admitted who has not completed the course offered by the high school at his home, except upon the written application of parent or guardian, accompanied by the endorsement of his high school principal.

RESTRICTIONS.—The pupils of the Practice High School are considered boys and are not permitted to join any class, society, fraternity, athletic team, or other organization conducted for or by the college students—in other words, they are not allowed to take part in any college activity. A pupil violating this regulation will be required to withdraw immediately from the High School.

STUDIES.—The work offered is that of the eleventh and twelfth grades of the standard high schools of Florida. Not less than eighteen nor more than twenty-two hours may be taken in any one year except by special permission. English and mathematics are required the first year; English and history, the second. The remaining work—ten to twelve hours in the first year, eleven to thirteen and one-half in the second—may be chosen only after consultation with the Dean of the Teachers College. If a modern foreign language is chosen, it must be pursued during both years.

HIGH SCHOOL CURRICULUM

Third Year, or Eleventh Grade

NAMES OF COURSES	NATURE OF WORK	HOURS PER WEEK
*English	Rhetoric, Composition and Classics	4
*Mathematics	Plane Geometry	4
Take from 10 to 12 hours of the following:		
Latin	Beginner's, Cæsar, or Cicero and Composition	4
Spanish	Elementary Course	4
French	Elementary Course	4
History	Mediaeval and Modern	4
Science	Physics	4
Manual Training	Wood Work	3
Agriculture	Elements of Agronomy and Horticulture	3
Required		18 to 20

*Required of all pupils.

Fourth Year, or Twelfth Grade

NAMES OF COURSES	NATURE OF WORK	HOURS PER WEEK
*English	American and English Literature and Composition	4
*History	American History and Civics	4
Take from 11 to 13½ hours of the following:		
Latin	Cæsar, Cicero, or Virgil and Composition	4
Mathematics	Solid Geometry and Plane Trigonometry	4
Spanish	Intermediate Course	4
French	Intermediate Course	4
Agriculture	Elements of Animal Husbandry and Agricultural Engineering	3
Science	Chemistry	4
Manual Training	Forge and Foundry Work	1½
Required		19 to 21½

CORRESPONDENCE COURSES FOR TEACHERS

The Teachers College and Normal School has prepared correspondence courses for teachers in such subjects as School Management, General and Special Methods of Teaching the various elementary and grammar school studies, Psychology, and the History of Education. It is preparing courses in some of the regular academic subjects. Reading courses will also be suggested, for the completion of which certificates will be given.

These courses are open to all white teachers, and should appeal to those who are not able to attend school or college and yet desire to continue their studies. For further information, address Dean Jno. A. Thackston.

STATE HIGH SCHOOL INSPECTION

This division of the College was made possible through the liberality of the General Education Board of New York. (See page 15.)

The Dean of the College will visit and inspect the high schools of the State, and promote in every way possible their development. He will give what aid he can toward establishing high schools where they do not exist. Whenever requested, he will gladly discuss with school officials or private citizens any educational matter that may tend toward the welfare and improvement of the high schools of the State.

*Required of all pupils.

TEACHERS' EMPLOYMENT BUREAU

This bureau was instituted primarily to assist teachers who had attended the University in securing positions and to furnish schools with trained and efficient instructors. At the request of many school officials, however, the services of the Bureau have been placed at the disposal of every good teacher in the State. This has been done because of the scarcity of trained teachers and because of the difficulty county superintendents and high school principals often encounter in filling vacancies. Superintendents, principals, and teachers throughout the State are invited to co-operate with the Bureau to the end that the cause of education in Florida may be furthered. Officials needing trained men or women, and teachers desiring promotion or change, are asked to call upon the Bureau for its aid. No charges are made by the Bureau for its services.

UNIVERSITY SUMMER SCHOOL

(Co-Educational)

June 16—August 8, 1913.
June 15—August 7, 1914.

SUMMER SCHOOL BOARD

STATE SUPT. W. N. SHEATS, A.M., LL.D.
PRES. A. A. MURPHREE, A.M., LL.D.
PRES. EDWARD CONRADI, A.M., Ph.D.

FACULTY (1913)

A. A. MURPHREE, A.M., LL.D.,
President.

JOHN A. THACKSTON, Ph. D.,
Professor of Education and Psychology.

J H. WORKMAN, A.B.,
Professor of English and Civics.

F. W. BUCHHOLZ, A. B.,
Professor of Foreign Languages.

P. W. CORR, A.B.,
Professor of History and Science.

W. S. CAWTHON, A.B.,
Professor of Mathematics.

MISS JESSIE MORRELL,
Professor of Primary Methods.

C. L. WILLOUGHBY, B.Agr.,
Professor of Science.

FACULTY (1914)

A. A. MURPHREE, A.M., LL.D.,
President.

JNO. A. THACKSTON, Ph.D.,
Professor of Education and Psychology.

W. S. CAWTHON, A.M.,
Professor of Mathematics.

P. W. CORR, A.B.,
Professor of History.

E. L. ROBINSON, A.M.,
Professor of Latin.

W. L. FLOYD, M.S.,
Professor of Science.

I. I. HIMES, A.B.,
Professor of English.

MISS JESSIE MORREL,
Professor of Primary Methods.

H. W. COX, Ph.D.,
Professor of Philosophy.

J. N. ANDERSON, Ph.D.,
Professor of Modern Languages and Advanced Latin.

GEO. M. LYNCH, A.B.,
Professor of Rural School Methods and Management.

C. K. McQUARRIE,
Director of Corn and Tomato Club Work.

GENERAL STATEMENT

The University Summer School was provided for by the "Summer School Act" passed by the Legislature of 1913. Section 1 of this Act reads in part: "that there is hereby established and created in this State three summer schools to be located as follows: One in connection with the University of Florida at Gainesville, ... "

The entire equipment of the University is at the service of the faculty and students of the Summer School. The libraries, laboratories, dormitories, and dining-hall are open during its session.

Board and lodging (including lights) will be offered at $4.00 per week, or $30.00 for the entire session of eight weeks, payable in either case in advance. Those occupying dormitory rooms must, however, furnish their own pillows, bed linen, and towels.

Attention is directed to the following sections of the "Summer School Act."

CREDIT TOWARDS NORMAL SCHOOL AND COLLEGE DEGREES

Sec. 5.—"All work performed at the said Summer Schools shall be of such character as to entitle the students doing the same to collegiate, normal or professional credit therefor, and may be applied toward making a degree."

EXTENSION OF TEACHERS' CERTIFICATES

Sec. 6.—"All teachers attending any one of the Summer Schools herein created and whose work entitles them to credit therefrom upon making proof of the same to any County Superintendent of Public Instruction in this State are hereby entitled to one Year's extension on any teacher's certificate they may hold and which has not fully expired."

Certificates of credit making proof of the work done will be granted by the State Superintendent and the President of the Summer School only to those teachers who attend the full term and whose work is satisfactory.

REGULATIONS.—To fulfil its highest mission the Summer School should not be utilized merely for the purpose of "cramming" for examinations. It is therefore hoped that all teachers will recognize the wisdom of the Summer School Board in establishing the following regulations:

1. No teacher shall be allowed to take more than twenty hours per week of purely academic subjects.

2. No teacher shall take less than five hours per week of profesional work.

3. The maximum number of hours per week, including professional, vocational and academic subjects, shall, in no case, exceed twenty-seven. Two laboratory hours shall count as one hour of academic work.

COURSES OF STUDY

GROUP I.—*Education and Psychology.*—Theory and Practice of Teaching; Psychology; History of Education. (*Each* 5 *hours.*)

GROUP II.—*English.*—Reading and Spelling. (2 *hours.*) —Grammar and Composition; Rhetoric; English Literature. (*Each* 4 *hours.*)

GROUP III.—*Foreign Languages.*—Beginner's Latin; Cæsar; Virgil; French or German. (*Each* 4 *hours.*)

GROUP IV.—*Civics and History.*—Civil Government. (2 *hours.*)—History of the United States and of Florida; General History. (*Each* 4 *hours.*)

GROUP V.—*Mathematics.*—Arithmetic; Algebra; Geometry; Trigonometry. (*Each* 4 *hours.*)

GROUP VI.—*Primary Methods.*—Drawing and Singing. (Time to be arranged by the instructors.)

GROUP VII.—*Science.*—Geography; Physiology. (*Each* 2 *hours.*)—Physical Geography; Botany; Zoology; Physics. (*Each* 4 *hours.*)

GROUP VIII.—*Vocational.*—Nature Study. (2 *hours.*)—Agriculture; Manual Training; Domestic Economy. (*Each* 4 *hours.*)

One advanced course of college grade will be offered in each Group, provided that a sufficient number of teachers apply for it.

SPECIAL DEPARTMENTS

The following departments do not rightly belong under any individual college, and are hence grouped here:

EXPRESSION AND PUBLIC SPEAKING

Mr. Chapman

Expression and Public Speaking.—In the comparatively brief courses offered during the years 1910-1914, particular attention has been given to establishing a correct method of breathing, to correcting faulty articulation, and to teaching the principles of interpretation by voice, gesture, and facial expression. It is believed that the interest shown in the work gives promise of being greatly increased during the coming year, and it is confidently expected that it will be possible to offer a much longer and more comprehensive course than was possible during the year recently closed.

On account of lack of funds a small tuition fee is charged.

MUSIC

Mr. Miller

The department has direction of the University glee, guitar, and mandolin clubs, of the Student orchestra, and of the music at the chapel exercises. Instruction has during the past year been given in voice culture, sight singing, violin and other stringed instruments. To this will be added lessons on the piano.

Vocal.—Special attention is given to teaching control of breath and of singing muscles and to developing power, range, and pureness of tone. All students of vocal music are required to take two lessons a week in sight singing, and students not registered for the regular work are urged to attend the meetings of this class. In connection with this branch an excellent glee club has been organized. During the year several concerts have been given locally and in neighboring cities, and one trip of a week's duration has been taken. In 1913-14 a choral society was formed which, in addition to part singing, undertakes at least one oratorio each year.

Instrumental.—The Director of the department has had years of experience in orchestral work, and has succeeded in developing the University orchestra to a high state of excellence.

During the past year, in addition to training this and the guitar and mandolin clubs, he has devoted a large part of his time to teaching the violin.

Owing to lack of funds for this department a small charge is made for tuition.

PHYSICAL CULTURE AND ATHLETICS

Mr. Pyle

GYMNASTICS.—All Freshmen are required to take three hours per week of gymnasium work under the direct supervision of the Physical Director. In the other classes the work is optional. The course consists of drills with dumb bells, Indian clubs, wands, and free hand; heavy and light work on buck, German horse, parallel bars, horizontal bar, etc.; tumbling and mat; basket ball and other games. The more proficient gymnasts compete for positions on the "Varsity Gymnasium Team," which gives several public performances during the year, and an exhibition during Commencement week.

ATHLETICS.—Assisted by special coaches, when needed, the Physical Director trains the various athletic teams.

DIVISION OF UNIVERSITY EXTENSION

STAFF

ALBERT A. MURPHREE, AM., LL.D.,
President of the University.

P. H. ROLFS, M.S.,
Director.

C. K. McQUARRIE,
State Agent in Charge of Farmers' Co-operative Demonstration Work and Farmers' Institutes.

A. P. SPENCER, M.S.,
Vice-Director and Animal Industrialist to the Experiment Station. Farmers' Co-operative Demonstration Work.

E. S. PACE, B.S.,
District Agent for North and West Florida, Farmers' Co-operative Demonstration Work, and Assistant in Farmers' Institutes.

J. J. VERNON, M.S.A.,
In Charge of Agricultural Correspondence Courses.

J. A. THACKSTON, Ph.D.,
In Charge of Correspondence Courses of the Teachers College and Normal School.

J. M. SCOTT, B.S.,
Lecturer on Farm Crops and Animal Husbandry.

B. F. FLOYD, A.M.,
Lecturer on Citrus.

J. R. WATSON, A.M.,
Lecturer on Insects.

JOHN BELLING, B.Sc.,
Editor.

BESSIE V. GLOVER,
Secretary.

GENERAL STATEMENT

This Division is carried on for the purpose of extending the benefits of the University to every community in Florida. The material advantages to be thus derived by the State cannot be overestimated, and have already been felt in nearly every county. Since Florida is essentially an agricultural State, the Division concerns itself mainly, although not exclusively, with agricultural interests.

The work of the Extension Division has been broadened from time to time, until now it includes the following more or less definite lines:

(1) Institutes: (a) Farmers' Institutes,
(b) Women's Institutes,
(c) County Institutes and Produce Contests,
(d) Institute Train.
(2) Publications.
(3) Correspondence Courses.
(4) Farmers' Co-operative Demonstration Work.
(5) Field Instruction.
(6) Field Institutes.
(7) School for Demonstration Agents.
(8) Boys' Corn Clubs.
(9) Girls' Canning Clubs.

INSTITUTES

FARMERS' INSTITUTES.—*Farmers' Institutes* bring directly to the workers of the soil the discoveries of the Agricultural Experiment Station and the latest teachings of the College of Agriculture, and present them so that they can be easily understood. They are really short courses in agriculture. In the older States, where they have been held for a number of decades, the teaching is done as carefully as in any college or university. In Florida they have been so systematized that the largest and best results possible are obtained. The amount of this work that can be done depends, however, directly upon the amount of support received.

The professors of the College of Agriculture and the staff of the Experiment Station give as much time as possible to Farmers' Institute lectures. The professors are engaged primarily in teaching and the Experiment Station staff primarily in investigating agricultural problems; necessarily there are many times when it

would be disastrous to the Experiment Station or to the College for the various workers to leave the University grounds.

How Organized.—When it is thought desirable to hold an Institute in a community, arrangements are to be made with the Director of the Extension Division. At a first meeting the local people should elect a president and secretary, whose duties are to arrange for taking care of the audience, select a suitable meeting place, advertise the Institute, and secure as large an audience as possible.

In the last three years calls for Farmers' Institutes have been so numerous and the funds for carrying them on so limited that it has been necessary to put nearly all on circuits. In special cases, however, it is possible and advisable to hold isolated Institutes, as, for instance, when in a restricted locality there is a severe outbreak of certain insects or of certain diseases that need to be handled by a specialist. Arrangements for such Institutes must be made directly with the head of the Division. These Institutes are among the most profitable, but can be held only when conditions are such as not to interfere too seriously with the regular work of the specialist.

Equipment.—The Farmers' Institute squads are equipped with the best and most complete appliances. For the lecture work, sixty large charts, each six feet square, are used. These tabulate the lectures in such a way as to make the main points stand out clearly before the audience. To supplement the charts, about one hundred enlarged photographs, illustrating particular points, are carried. A stereopticon lantern, equipped for acetylene gas or electrical attachments, is frequently found of use. With it are carried about three hundred views, varied enough to suit the interests of almost any part of the State.

Results.—The results from systematic work in Farmers' Institutes are felt almost immediately in the general improvement of agricultural conditions. In Florida, the activities of the Farmers' Institutes have been coincident with the greatest improvement in crop production that the State has ever seen. Taking corn as an illustration, the crop for 1907 was the largest produced up to that time, 4,351,000 bushels. That year 42 sessions of Institutes were held, with a total attendance of 4,491. The average corn production was 9.6 bushels per acre. In 1908, 6,584,000 bushels of corn were produced, at the rate of 10.5 bushels per acre. Dur-

ing this year 54 sessions were held, with a total attendance of 5,576. In 1909 the corn crop amounted to 8,379,000 bushels, with an average production of 12.6 bushels per acre. That year nearly 100 Institutes were held, with a total attendance of about 10,000. During the fiscal year ending June 30, 1913, 200 sessions of Institutes were held, with a total of 20,000 in attendance. The corn production of the State for 1913 rose to 15 bushels per acre, over fifty per cent increase of yield per acre since the beginning of systematic Farmers' Institute work. The total was 10,125,000 bushels. As corn shipped in from outside was selling at $1.00 to $1.20 a bushel, the total value of the crop must have been over $10,000,000, making corn second in money value only to citrus. The actual value of the corn crop exceeds that of citrus. A large amount of it is used for food. The rest of it is fed to stock. Thereby the farm is enriched and money is derived from the sale of the stock.

As the majority of the sessions held in 1913 were designed for the betterment of the soil and for the improvement especially of the corn crop, the Institutes must have had more or less beneficial effect upon the production.

Other crops have been similarly improved; but corn, being the standard, serves best for illustrative purposes. And the increased production, due for the most part, or entirely, to better farming methods, has added millions of dollars annually to the revenues of the farmers of the State.

Women's Institutes.—As it is quite as important to disseminate information that will benefit farm homes as it is to teach improved methods of agriculture, *Women's Institutes* are now being held in nearly all the Southern States. The two movements go hand in hand, for better crops and better farms are one step in the direction of better homes. The Women's Institutes are perhaps the more important, for it is well known that farm homes are less likely to be supplied with modern utensils and to be managed properly than are the farms themselves.

Four years ago, with the co-operation of the Department of Home Economics of the State College for Women, the holding of Women's Institutes was begun in Florida. These Institutes have been so successful that the Legislature has appropriated to the College for Women a sufficient sum of money to continue holding them. They are held in conjunction with the Farmers' Institutes.

Women's Institutes have been arranged in several different places since July 1, 1913. A member of the faculty of the State College for Women has assisted by discourses, lectures, and demonstrations on different phases of home life: Sanitation in and about the home; food values of meat, cereals and vegetables, and the different methods of preparing them; furnishing the various rooms of the house, especially dining-room and kitchen, so that the labor of the household may be lessened and made more effective. At each place the women organize a Home Improvement Club, electing a president, vice-president, secretary and treasurer. These clubs are a basis for more aggressive work, and are useful agencies for the improvement of rural society.

County Institutes and Produce Contests.—*Produce Contests* have been conducted in connection with *County Institutes* in Gadsden, Liberty, and Polk Counties. Small prizes for farm products, ranging from 50 cents to $5.00, were offered by merchants and other residents for the purpose of stimulating greater interest among the farmers. Additional prizes were subscriptions to the "Progressive Farmer," "Southern Planter," and "Florida Grower." These contests have resulted in the bringing together of exhibits of farm products and live stock which in quality would compare favorably with those at county fairs.

Institute Train.—By running, in co-operation with the University of Florida, "Better-Farming Specials," the railroads of the State have indicated in previous years their desire to assist in agricultural development. This year, owing to lack of funds, the Extension Division of the University was not able to engage in a similar undertaking. Several trains, equipped and financed entirely by the railroads, were, however, run, although none of these made long trips. As far as possible the Extension Division co-operated in this work, and especially with the G. S. & F. R. R. in its effort to develop the farming lands in Florida through which its trains pass.

The Extension Division also joined the Southern R. R. in the endeavor to interest more farmers in dairying and to put this industry on a better basis. The "Dairy Train" sent out for this purpose had good results. In every way possible, too, it furthered the purposes of the "Good Roads Train."

During the fall of 1914 a "Better Farming Special" train will be run over the more important railroads of the State. This train

will be better equipped and should serve more people than the one run in 1911.

ATTENDANCE.—During the fiscal year ending July 1, 1913, upwards of 200 sessions of Institutes were held and over 400 addresses were delivered. More than 20,000 people were in attendance.

SPEAKERS FROM UNIVERSITY OF FLORIDA:

A. A. Murphree, President.
P. H. Rolfs, Director of Experiment Station and of Extension Division.
C. K. McQuarrie, State Agent in Charge of Farmers' Co-operative Demonstration Work.
A. P. Spencer, Vice-Director of Extension Division and District Agent, Farmers' Co-operative Demonstration Work.
J. J. Vernon, Dean, College of Agriculture.
J. M. Scott, Animal Industrialist, Agricultural Experiment Station.
Harvey W. Cox, Professor of Philosophy and Education.
E. W. Berger, State Nursery Stock Inspector.
B. F. Floyd, Plant Physiologist, Agricultural Experiment Station.
S. E. Collison, Chemist, Agricultural Experiment Station.
John Belling, Assistant Botanist, Agricultural Experiment Station.
W. L. Floyd, Professor of Horticulture.
H. E. Stevens, Plant Pathologist, Agricultural Experiment Station.
J. R. Watson, Entomologist, Agricultural Experiment Station.
O. F. Berger, Asst. Plant Pathologist, Agricultural Experiment Station.
C. L. Willoughby, Professor of Dairying and Animal Husbandry.

OTHER SPEAKERS:

C. S. Bushnell, Arcadia, County President, Farmers' Union.
C. K. Allan, Sopchoppy, Supt. Public Instruction, Wakulla County.
O. L. Mizell, Dukes, County Agent, Farm Demonstration Work.
T. Z. Atkeson, Live Oak, County Agent, Farm Demonstration Work.
R. E. Rose, Tallahassee, State Chemist.
E. H. Sellards, Tallahassee, State Geologist.
J. L. Shepard, Greensboro.
C. H. Simpson, Milton.
R. W. Storrs, DeFuniak Springs.
Edward Conradi, Tallahassee, President, State College for Women.
H. E. Savely, Washington, D. C., Field Agent, Farmers' Co-operative Demonstration Work, U. S. Department of Agriculture.
W. N. Conolly, Jacksonville, Secretary, Board of Trade.
Joseph Y. Porter, Jacksonville, Secretary, State Board of Health.
W. A. Hendry, Perry.
J. D. Rooney, Ocala, Secretary, Board of Trade.
R. E. Grabel, Charlotte, N. C., Farm Improvement Agent, G. S. & F. R. R.
Miss A. E. Harris, Tallahassee, Director, Household Economics, State College for Women.
Miss Mae L. Wells, Tallahassee, Asst. in Extension Division, State College for Women.
Jack Peters, Tavares, Agricultural Adviser, Lake County Improvement Association.
Dr. A. C. Drach, Atlanta, Ga., U. S. Bureau of Animal Industry.
D. R. McQuarrie, Madison, County Agent, U. S. Farm Demonstration Work.

Mrs. Marian A. MacAdow, Punta Gorda.
Hon. W. A. McRae, Tallahassee, Commissioner of Agriculture.
W. H. Harns, Sopchoppy.
Clarence Woods, Eustis.
W. L. Watson, Jacksonville, County Agent, U. S. Farm Demonstration Work.
C. F. Dawson, Jacksonville, State Veterinarian.
B. F. Bahnsen, Atlanta, Ga., State Veterinarian.
E. M. Nighbert, Atlanta, Ga., Expert in Tick Eradication, U. S. Bureau of Animal Industry.
Hon. J. W. Barber, Macclenny, President, State Live Stock Association.
F. E. Waldrup, Macon, Ga., Field Agent, G. S. & F. R. R.
L. E. Dozier, Leesburg.
Miss Flora Brown, Tavares.
B. L. Hammer, Tampa.
Dr. H. G. Bystra, Holder.
George N. Bressler, Tavares.
J. D. Molter, Gainesville.

OFFICERS OF LOCAL FARMERS' INSTITUTES:

Alachua County—

Island Grove: J. R. Shaw, Pres.; H. M. Baker, Secy.
Trenton: C. A. Williams, Pres.; R. H. Jones, Secy.

Baker County—

Macclenny: W. C. Thompson, Pres.; Tait Powell, Secy.

Bay County—

Lynn Haven: W. R. S. Burnett, Pres.; Frank McMullen, Secy.
Panama City: Judge West, Pres.; H. G. Mathis, Secy.

Bradford County—

Heilbron: J. D. McCormick, Pres.; J. E. J. Wainwright, Secy.
Lake Butler: O. L. Mizell, Pres.; H. W. Hodges, Secy.
Providence: J. D. Stencil, Pres.; P. T. Taylor, Secy.
Worthington Springs: W. Williams, Pres.; T. B. Edwards, Secy.

Brevard County—

Eau Gallie: Dr. E. E. Macy, Pres.
Jamestown: J. H. Tiffany, Titusville, Pres.; Guy Austin, Secy.
Malabar: W. J. Jons, Pres.

DeSoto County—

Arcadia: C. S. Bushnell, Pres.; Harry Burton, Secy.
Avon Park: Wm. King, Pres.; Norton T. Smith, Secy.
Bermont: E. E. Bailey, Pres.; G. W. Gatewood, Secy.
Fort Ogden: Jno. E. Williams, Pres.; Dr. W. H. Smoke, Secy.
Popash: Jos. Crews, Wauchula, Pres.; J. C. Carter, Crewsville, Secy.
Venus: B. F. Johnson, Pres.; J. M. Frye, Secy.
Wauchula: T. G. Wilkerson, Pres.; T. S. Golden, Secy.

Escambia County—

Cottage Hill: C. W. McDonald, Pres.
Ferry Pass: R. E. Jones, Pensacola, Pres.; Mrs. M. H. Fairchild, Pensacola, Secy.
Gonzales: C. J. Hudgins, Pres.
Klondike: J. W. Jefferson, Cantonment, Pres.
Myrtle Grove School: Mrs. M. E. Graves, Pres.; F. L. Thompson, Secy.

Gadsden County—
Greensboro: Hon. J. L. Shepard, Pres.; M. N. Smith, Secy.
Havana: A. J. Smith, Pres.; C. D. Wilcox, Secy.

Hamilton County—
Jennings: B. W. Wells, Pres.; B. J. W. Blair, Secy.

Hernando County—
Brooksville: J. C. Nugent, Pres.; C. W. Colley, Secy.

Hillsboro County—
Knights: W. T. Watkins, Pres.; A. W. Carlton, Secy.
Lake Magdalene: Dr. A. G. Lowe, Pres.; B. E. Stall, Secy.
Ruskin: H. L. Buckley, Pres.; J. S. Jones, Secy.

Holmes County—
Bethlehem: Jno. Sylvester, Black, Ala., Pres.; J. E. Kelly, Black, Ala., Secy.
Bonifay: J. McLaughlin, Pres.; W. A. Sessoms, Secy.
Sandy Creek: Miss Mary Lou Mathis, Secy.

Jackson County—
Malone: B. H. Hatton, Pres.; E. E. Anderson, Secy.

LaFayette County—
Mayo: D. C. Geiger, Pres.; J. J. Handley, Secy.

Lake County—
Clermont: C. H. Wilson, Pres.; H. E. Cook, Secy.
Grand Island: I. H. Adair, Tavares, Pres.; J. T. White, Tavares, Secy.
Groveland: W. A. Lyons, Pres.; G. A. Free, Secy.

Leon County—
Woodville: Hon. A. E. Register, Pres.; T. J. Appleyard, Jr., Secy.

Liberty County—
Bristol: M. N. Herndon, Pres.; J. E. Peddie, Vice-Pres.; D. H. Freeman, Secy.

Madison County—
Lee: H. J. Jones, Pres.; G. W. Ponder, Secy.
Greenville: J. W. Grubbs, Pres.; H. W. James, Vice-Pres.; W. M. Taylor, Secy.
Madison: Prof .W. B. Cate, Pres.; W. M. Taylor, Secy.

Marion County—
Fort McCoy; H. W. Pilsbury, Pres.; Miss M. H. Scott, Secy.
Reddick: H. E. Tinker, Pres.; L. S. Light, Secy.
Summerfield: A. M. Buser, Pres.; H. R. L. White, Secy.

Nassau County—
Boulogne: A. L. Kilbury, Pres.; Miss Louis Cutler, Secy.
Callahan: W. W. Cushing, Pres.; D. H. Petree, Secy.
Hilliard: J. H. Topper, Pres.; A. G. Vensel, Secy.

Orange County—
Zellwood: C. H. Baker, Pres.; Wm. Edwards, Secy.

Osceola County—
St. Cloud: F. P. Wentworth, Pres.; W. P. Lynch, Secy.

Pasco County—
Zephyrhills: O. E. Briggs, Pres.; U. G. Clark, Secy.

Pinellas County—
Largo: W. A. Belcher, Pres.; H. J. Bosworth, Secy.

Polk County—
Davenport: F. B. Hitchcock, Pres.; H. E. Sands, Secy.
Ft. Meade: R. W. Hancock, Pres.; Kline O. Varn, Secy.
Lakeland: Judge W. S. Preston, Pres.; Dr. W. H. Conibear, Secy.

Putnam County—
Mannville: H. T. Mann, Pres.

Santa Rosa County—
Allentown: R. T. Oglesby, Pres.; Oliver Jernigan, Secy.
Baker: John Wilkerson, Pres.; J. L. Miller, Secy.
Camp Walton: W. H. Hartgrove, Pres.
Milton: C. H. Simpson, Pres.; S. J. Harvey, Secy.
Wallace: Curtis Jernigan, Pres.; J. H. Haines, Secy.

St. Johns County—
St. Johns Park: B. F. Warner, Secy.

Sumter County—
Webster: Prof. Glen Terrell, Pres.; L. L. Sutton, Secy.

Suwannee County—
Live Oak: W. J. Hillman, Pres.; Jack Hawkins, Secy.

Taylor County—
Perry: J. C. Calhoun, Sr., Pres.; W. A. Hendry, Secy.

Wakulla County—
Ivan: T. S. Green, Ben Haden, Pres.; J. B. Gowdy, Ben Haden, Secy.
Medart: C. B. Pigott, Arran, Pres.; Wm. Green, Arran, Secy.
Sopchoppy: W. H. Harms, Pres.; Prof. C. K. Allen, Secy.

Walton County—
Glendale: Wm. Murphy, Pres.; J. W. Henderson, Secy.
Knox Hill: N. A. McLeod, Pres.; J. L. King, Secy.
Santa Rosa: W. M. Wilson, Pres.; A. B. Cessna, Secy.

Washington County—
Chipley: J. R. McColsky, Pres.; C. E. Pleas, Secy.

PUBLICATIONS

The publications of the Extension Division differ from the bulletins of the Experiment Station in that the former are either reprints of Experiment Station bulletins or compilations from other sources, whereas the latter are based upon fundamental experiments that have been carried on by means of the Experiment Station funds.

The following bulletins have been issued by the Extension Division:

112. Tomato Insects, by J. R. Watson.
117. Tomato Diseases, by P. H. Rolfs.
118. Sugar Cane and Syrup Making, by A. P. Spencer.
119. Fungus Diseases of Scale Insects and Whitefly, by P. H. Rolfs and H. S. Fawcett.
120. Irish Potatoes, by A. P. Spencer.

In addition to these, numerous press bulletins have been issued.

CORRESPONDENCE COURSES

Correspondence courses for teachers, farmers, farmers' wives, and others, are being offered. For a description of these and registration requirements, see under College of Agriculture, page 100, and under Teachers College and Normal School, page 150.

FARMERS' CO-OPERATIVE DEMONSTRATION WORK

The Farmers' Co-operative Demonstration Work originated with the Southern Educational Board, who appropriated $10,000 to better rural conditions in Florida. On the advent of the boll weevil the Farmers' Demonstration Work was provided for by a Congressional appropriation of about $20,000. In 1911 the Florida legislature appropriated $5,000 annually; thus making a total of $25,000 for carrying on Demonstration work.

In 1909 the Hon. A. S. Meharg, of Mississippi, was sent to Florida as State Demonstration Agent. Under his leadership good progress was made. In 1913 twenty-four counties were organized, each with a County Demonstration Agent. On July 1, 1913, the Department of Agriculture reluctantly accepted Mr. Meharg's resignation owing to his failing health. Following this, arrangements were entered into with the University of Florida, by which the Farmers' Co-operative Demonstration Work became a department of the Extension Division of the University with headquarters on the campus. On January 7, 1914, Mr. C. K. McQuarrie began his work as State Agent.

The magnitude and character of the undertaking demand the undivided time of a separate corps of workers. These carry directly to the farmer the accepted principles of agricultural science and the latest discoveries.

Organization.—The State officers of the Farm Demonstration Work consist of a Director, a State Agent, District Agents, and County Agents.

The *Director* acts in an advisory way in shaping and directing the policies of the Farmers' Co-operative Demonstration Work.

The *State Agent* has direct supervision over the Demonstration Work in Florida as outlined by the Office of Farmers' Co-operative Demonstration Work, Washington. His duties are primarily administrative. Through the District and County Agents he directs and manages all undertakings.

The *District Agent* directs the County Agents, assists them in organizing so as to make their work more effective, visits the co-operative farmers with the County Agents as far as practicable, and directs the Boys' Club Work throughout his district. Florida has two Demonstration Districts: the western comprising the counties from the Suwannee westward; the southern including the counties east and south of the Suwannee.

The *County Agent* is usually selected from his home county. In most cases he is chosen because he has made a success of his own farm. His work is to enlist the co-operation of the farmers of his county and to induce them to grow two or more staple crops according to the best methods. He will solicit such co-operation from as many farmers as he can visit at least as often as once every thirty days. He keeps a complete record of all operations and files weekly reports with the District and State Agents, by whom these reports are forwarded to the main office in Washington, D. C.

The sum of six hundred and seventy-five ($675.00) dollars of Federal funds is allotted to each county of Florida that takes up the Co-operative Demonstration Work. This Demonstration work will be extended, in so far as co-operation is found and funds are available, until it covers all the counties of the State. Up to the present time it has been possible to accommodate all of the counties that have made an organized effort to secure a County Demonstration Agent. Other counties wishing to avail themselves of government funds for Demonstration Work should confer with the State Agent, Gainesville, Florida.

STAFF

ALBERT A. MURPHREE,
President of the University.

BRADFORD KNAPP,
Special Agent in Charge of Farmers' Co-operative Demonstration Work, for U. S. Department of Agriculture, Washington, D. C.

P. H. ROLFS,
Director for University.

C. K McQUARRIE,
State Agent, Farmers' Co-operative Demonstration Work, Bureau of Plant Industry, U. S. Department of Agriculture.

A. P. SPENCER,
District Agent for Central and South Florida.

E. S. PACE,
District Agent for North and West Florida.

AGNES ELLEN HARRIS,
Assistant Agent for The Florida State College for Women—In Charge of Girls' Canning Clubs.

BESSIE V. GLOVER,
Secretary.

COUNTY DEMONSTRATION AGENTS

County	*Agent*	*Postoffice*
Baker	E. W. Turner	Macclenny
Bradford	O. L. Mizell	Dukes
Columbia	J. D. Brown	Lake City
Duval	W. L. Watson	Jacksonville
Escambia	S. W. Hiatt	Gonzalez
Gadsden	M. C. Gardner	Greensboro
Hillsboro	R. T. Kelley	Plant City
Holmes	C. A. Fulford	Bonifay
Jackson	G. W. Belser	Marianna
Lafayette	D. C. Geiger	Mayo
*Lake	Jack Peters	Tavares
Levy	W. E. Brown	Williston
Leon	Frank Robinson	Tallahassee
Liberty	A. W. Turner	Bristol
Madison	D. R. McQuarrie	Madison
Marion	S. J. McCully	Berlin
Orange	C. H. Baker	Zellwood
Pasco	I. E. Soar	Dade City
Polk	A. A. Lewis	Kathleen
Santa Rosa	O. O. Simmons	Botts
Suwannee	T. Z. Atkeson	Live Oak
Walton	J. C. Smith	DeFuniak Springs
Washington	D. G. McQuagge	Chipley

*Not under government supervision.

FIELD INSTRUCTION

In addition to the regular instruction given by the farm demonstrators and co-operators in each of the several counties, County Demonstration Agents give field instruction to farmers so far as their time permits. This instruction consists of advice as to the best methods of conducting farm operations. Each County Agent is required to be familiar with books and bulletins pertaining to farming, live stock, and horticulture.

FIELD INSTITUTES

The County Demonstration Agents will pay special attention to holding Field Institutes in the various counties. Such Institutes must be arranged so that they will aid in the demonstration work and not interfere with it. During the crop growing season Institutes will be held and farmers assembled at the farms that are especially useful as object lessons in the matter of crop production.

General "round-ups" and County Institutes will be held at the seasons of the year when the farmers can best afford to take time for educational work. Each County Agent will make it his special duty to look after the holding of these Institutes. The State Demonstration Agent will make arrangements for the lecturers and speakers for each Institute and the people interested will secure a central location and give notice of the meeting to the farmers of the county.

SCHOOL FOR DEMONSTRATION AGENTS

The Demonstration Agents are assembled annually at the University for a week's instruction. This instruction takes a wide range, since it includes the whole list of agricultural subjects of study. During the week the agents are given special instruction in the best methods of presenting these subjects to the demonstrators of the various counties.

BOYS' CORN CLUBS

Each Boys' Corn Club is conducted directly under the supervision of a County Demonstration Agent in co-operation with the local school and County Superintendent. Encouragement and help are given to all boys who enlist for the work, the hearty co-operation of schools is secured, the teachers' sympathy is enlisted,

and thus much good is done in the farming communities of the State.

All the boys in a community between the ages of ten and eighteen are eligible for membership in a club. Each member is required to grow at least one acre of corn, and it happens not infrequently that the boy raises more bushels to the acre using the new methods than does the father using the old.

The awards for the boys are made upon the following basis:

		Per Cent
1.	Greatest yield per acre	30
2.	Best exhibit of 10 ears	20
3.	Best written account, showing history of crop	20
4.	Best showing of profit on investment, based on the commercial price of corn	30
	Total	100

GIRLS' CANNING CLUBS

This work is carried on by Professor Agnes Ellen Harris, of the State College for Women, under the direction of the State Agent, among the school girls and in co-operation with the schools, especially the rural schools, of the several counties of the State. The clubs have been productive of great good, in that they have taught hundreds of families the best methods of canning and preserving farm products. They have also helped many girls to earn a small amount of extra money, and have even enabled some to attend college.

All the girls of a community between the ages of ten and eighteen are eligible to club membership. Each member is required to grow at least one-tenth of an acre of tomatoes or other vegetables.

The final awards are made upon the following basis:

		Per Cent
1.	Quality	20
2.	Quantity	20
3.	Variety	20
4.	Profit	20
5.	History	20
	Total	100

AGRICULTURAL EXPERIMENT STATION

STAFF

ALBERT A. MURPHREE, A.M., LL.D.,
President of the University.

P. H. ROLFS, M.S.,
Director.

JOHN M. SCOTT, B.S.,
Animal Industrialist and Assistant Director.

B. F. FLOYD, A.M.,
Plant Pathologist.

J. R. WATSON, A.M.,
Entomologist.

H. E. STEVENS, M.S.,
Plant Pathologist.

S. E. COLLINS, M.S.,
Chemist.

JOHN BELLING, B.Sc.,
Assistant Botanist and Editor.

O. F. BURGER, M.S.,
Assistant Pathologist.

S. S. WALKER, M.S.,
Assistant Chemist.

JOHN SCHNABEL,
Assistant Horticulturist.

ROBERT S. HOLLINGSHEAD, A.B.,*
Assistant Chemist.

EDGAR NELSON, A.B.,*
Assistant Plant Physiologist.

A. C. MASON, B.S.,
Laboratory Assistant in Entomology.

JULIUS MATZ, B.S.,
Laboratory Assistant in Plant Pathology.

MISS ETTA MEANS,
Librarian.

*Temporary appointment.

PURPOSE.—The Agricultural Experiment Station is an institution, founded by Congressional Act, the purpose of which is to acquire and diffuse useful agricultural knowledge. From the enacting clause, it is very clear that the intention of Congress was to establish with every agricultural college and university receiving the benefits of the original land-grant Act, an institution for purely investigational work. The Florida Experiment Station was founded in 1888, and has continued without interruption since that time. Since its funds are received from a Federal source, it must comply with the requirements of the Federal law. It should therefore be clearly understood that the Experiment Station fund is not intended, directly or indirectly, for teaching purposes, but for the purpose of acquiring new and important knowledge in regard to agricultural crops or agricultural soils. In order to receive the benefits of the Adams fund, it is necessary to plan the experiments and submit them to the United States Department of Agriculture for approval before any of the moneys are spent in the investigations.

PUBLICATIONS.—The publications of the Experiment Station are restricted to a report of the work done by members of the Staff. The printing of compilations and information of a general nature is not permissible under the funds.

There are three series of publications:

The Experiment Station Bulletins, each of which represents a more or less complete thesis on some particular line of work directly connected with the agriculture or horticulture of the State. In this series, 120 bulletins have been published. These are divided about equally between agriculture and horticulture. These bulletins must be issued as often as once in three months, and as many more times as may be thought advisable.

Press Bulletins are issued at short intervals, usually only a week elapsing between the different numbers. As the name indicates, these bulletins are prepared especially for the newspapers of the State. They announce new and important discoveries, and give other information directly connected with the activities of the Experiment Station that is known to be of immediate importance to the agricultural and horticultural people of the State. Two hundred and seventeen of these have been issued.

Reports to the Governor and to the Department of Agriculture are required annually. These contain a financial statement of

the distribution of the funds of the year before; also a brief résumé of the work done by the Experiment Station as a whole, and by the various departments in detail. Twenty-three annual reports have been issued.

Over a million pieces of mail matter have been distributed under the Experiment Station frank.

Lines of Investigation.—The work of the Florida Experiment Station is not sharply divided as to the different departments. The workers in the Experiment Station formulate what are known as projects. In these projects the work is carried out to the ultimate limits of the ability of the worker and the resources of the institution. A piece of investigation, once begun, is continued regardless as to whether its ramifications take it into one department or another. Not infrequently two or more departments are concerned in the solving of one project. Naturally, the lines of investigation fall into several departments: Horticulture, including plant breeding, plant introduction, propagation, etc.; Animal Industry, including the study of feed crops, the effect of feeding certain crops to cattle and hogs, and the growing of feed and forage crops; Agronomy, including the breeding of cotton, corn, and other farm crops; Plant Pathology, including the study of plant diseases produced by fungi and bacteria; Plant Physiology, including the study of plants as affected by fertilizer and soil conditions; Chemistry, including the study of fertilizers and soils, especially as to the effect on plants; Entomology, including the study of insecticides, insects, and their parasites.

Resources.—The resources of the Experiment Station have up to the present been limited to the funds received from the Federal Government. The Hatch fund became available in 1888; from this $15,000 has been received annually. In 1906 a further appropriation of $5,000 became available from the Adams fund. This fund increased by $2,000 annually, until it reached its limit of $15,000, making a total annual income of $30,000. Only five per cent of this fund can be used for building purposes, and that only when the experiments require this to be done. None of the money can be used directly or indirectly for teaching purposes or for paying for holding Farmers' Institutes. The Experiment Station has been in the present location since January 1, 1907. Since that time the laboratories have had to be established in the new location, the fields for agricultural and horticultural work

have had to be put into proper shape for experimentation, and other material has had to be collected.

New Laboratory Building.—The Legislature of 1907 appropriated $40,000 for the construction of a suitable laboratory building, which was completed during the summer of 1910 and occupied during August. It affords suitable laboratories and offices for the Staff of the Experiment Station, Extension Division, Co-operative Demonstration Work, and the Inspector of Nursery Stock. It is a three-story brick structure, containing about 18,000 square feet of floor space. This addition to the equipment is of great advantage to the State, since it increases the efficiency of all the workers—some to the extent of fifty per cent.

Advantages of Location.—The advantages of having the Experiment Station at the University cannot be easily over-estimated. The fields and orchards used for experiment work are open to the inspection of students and visitors. An experiment field is different from a demonstration field, inasmuch as no attempt is made to produce show crops or to do those things that a farmer can readily do for himself, but to discover unknown facts. The laboratories of the Experiment Station are planned and conducted for purely investigational work. This permits the students to observe and study investigational laboratories, and scores of those who have special inclinations in the direction of the lines of investigation carried on have had an opportunity to do some work in assisting the specialists.

The investigators in the Experiment Station deliver at frequent intervals popular and technical lectures either to the student-body as a whole or to special clubs and local organizations. This gives the students an opportunity of listening to lectures of an advanced nature in particular lines of investigation.

Minor positions, such as those of laboratory assistants in the Experiment Station, are open from time to time, and whenever practicable are given to graduates of the University who manifest ability in the special line of investigation. These laboratory assistants are paid a small salary for half of their time, and during the other half are free to take studies in the University leading to a higher degree.

Projects.—Some of the more important projects as outlined for the Experiment Station work are as follows:

1. The comparison of the Florida velvet bean with bran, silage, and other feeds for milk production.

2. The comparison of home-grown roughage with the ordinary commercial roughage for producing milk.

3. The determination of the value of Florida-grown feeds for beef production.

4. The determination of the value of Florida-grown feeds for pork production.

5. The breeding of a thoroughbred long-staple cotton that will meet the requirements of the average market.

6. The breeding of legumes for larger crop production under Florida conditions, especially the Lyon and velvet beans, and cowpeas.

7. Corn breeding with a view to getting thoroughbred varieties that will produce true to type and produce larger yields.

8. The growing and breeding of velvet bean hybrids.

9. The citrus orchard, which ultimately should include all of the earlier and more hardy varieties of citrus fruits.

10. A vegetable garden in which tests are made of various vegetables, and breeding work conducted for the production of disease-resistant varieties.

11. Hardy fruit orchard in which occur new and promising but hitherto untested fruits.

12. Plant-testing plots. In these occur over five hundred numbers of varieties of various kinds of economic plants not heretofore tested in Florida. The seeds are obtained from all parts of the world, selections being made from regions similar in climate to Florida.

13. The growing of forage crops useful for horses, cattle, and swine.

14. The making of a permanent pasture.

15. Soil and fertilizer studies. These include (a) the effect of quantity and kind of chemicals applied to citrus trees; that is, their effect upon the composition of the leaves, wood, and fruit, and the physiological effect on the plants; (b) the effect of these same chemicals upon the soil to which they are applied; the loss of the plant-food, either through leaching, or by escaping as gaseous ammonia, or nitrogen.

16. Citrus diseases. This includes a technical study of diseases that have hitherto caused a great deal of loss in the citrus orchard, but have never been worked up from a technical standpoint, such as gumming, buck-skinning, stem-end rot, etc.

17. Citrus whitefly. This investigation consists in the study of the three principal species of whitefly that are pests in the citrus orchard; a study of the life histories, with a view of finding out the most vulnerable points at which they can be attacked; and a study of the natural enemies, together with a study of the best artificial means of controlling the pests.

18. Nutrition and mal-nutrition studies. This includes a study of plant foods, especially in their relation to citrus, and also a study of disorders apparently due to unfavorable soil or to fertilizer conditions.

19. Among the recently introduced plants, which number several hundred, are some that are extremely promising for the State. Rhodes Grass, a native of Central or South Africa, has done extremely well and has been tested in nearly every county of the State. It appears to make a permanent meadow-grass in almost all sections where it is grown on good agricultural land.

Among the leguminous plants that have been introduced from foreign countries the Yokohama velvet bean appears to fill an important niche. This is a native of Japan, and has been nearly unknown until within the last five years. At that time it was not even scientifically described. It is the earliest of the velvet bean family to ripen, requiring about 120 days of summer temperature. As it is resistant to root-knot and pro-

duces a large amount of protein forage early in the year, its use will mark an important advance in our forage production.

The Chinese velvet bean, of which a single seed was received five years ago, is another important leguminous crop. This is especially valuable since it ripens early enough in the fall to keep from being killed by frost, and also early enough to escape serious ravage by the velvet bean caterpillar. It appears to ripen early enough in the year to escape frost in any section of Florida.

The Lyon velvet bean was introduced from the Philippine Islands seven years ago. This has proved to be extremely acceptable to a considerable number of farmers located in various parts of Florida. In general habit it resembles the Florida velvet bean.

20. Five hundred and thirty-three analyses of oranges and grapefruit have been made. These studies were undertaken to establish the relation of the ripening of these fruits to the season. In addition to these, studies of the variation due to different methods of cultivation, different kinds of fertilizers, different kinds of soil, and different varieties, were also taken up. The summary of this work, based on so large a number of analyses, will mark an important advance in our information on this, the leading crop in Florida.

STATE NURSERY STOCK INSPECTION

E. W. BERGER, Ph.D.,
Professor of Entomology and State Inspector of Nursery Stock.

The law (Chapter 6156, Laws of Florida) establishing a system of inspection, regulating the sale and exchange of nursery stock (trees, shrubs, vines, etc., and parts thereof) was passed by the State Legislature of 1911, and approved by the Governor on May 23, of that year. The law places the making of the rules and regulations for carrying into effect the purposes of the Act under the jurisdiction of the Board of Control. It provides for one Inspector and the necessary Deputies and Assistants, and that the Inspector's office shall be in the State Agricultural Experiment Station Building of the University.

The present Inspector, previously Entomologist of the Experiment Station, entered upon the duties of this office on July 1st, 1911. Besides the chief Inspector, ten Deputy Inspectors have been appointed. The duties of these, so far, have been wholly local, to make inspections of stock in the vicinity of the respective communities where they live.

The growing importance and need of the inspection of nursery stock offered for sale and exchange should be emphasized. Not only that, but the State needs a law governing the control of insect pests and diseases in groves and orchards. The man that buys a tree pays for a clean tree, free from insects and diseases; and the grower who realizes the need and importance of keeping injurious insects and diseases of trees under proper control should have recourse through the law enabling him to compel careless or indifferent neighbors to keep under control any injurious insects and diseases, the presence of which upon his neighbors' premises serves as a source of infestation and infection. That a tree overrun with insects or infected with a disease is as much of a menace to the community of trees as a case of small-pox or yellow fever is to the community of human beings, is self-evident; and the owners of orchards and groves are certainly entitled to some protection for their trees. These facts indicate clearly that not only will the inspection and certification of

nurseries have to be amplified by the gradual addition of more help to the inspection staff, but that men trained in a better knowledge of insects and diseases and the methods of control will be needed to inspect groves and orchards as soon as a grove and orchard pest law is passed.

The time is at hand when a better knowledge of insect pests and diseases and the methods of their control is needed in the grove, the orchard, and in the field. What does it profit a man if the whole world be made to bloom, and two blades of grass be made to grow where only one grew before, if, when the insects come and the diseases begin to ravage, he stands idly by unable to stem the tides of destruction? It is not enough to be able to grow a crop, but the grower must be prepared to protect the crop during an emergency, whether this be frost or fire, or insects and diseases. To protect intelligently a crop against injurious insects and diseases requires a certain amount of technical knowledge, and there is no better place to get this than at the University. It is therefore urged that students in agriculture or horticulture, and others who expect to own or operate groves and orchards, now at the University, or who intend to come, take the courses offered along the lines indicated. Having grounded himself in the fundamental knowledge of insects and diseases, the student, as a prospective grower, whether owner, manager, foreman, or expert advisor for his community, knows better where, when, and how to look for tree troubles, how to investigate them for himself, and whether the problem is beyond him and needs the attention of the professional Entomologist, Plant Pathologist or Plant Physiologist; and he knows better how to adapt the known remedies to different localities. Eight years' experience in the State has taught the writer that there are comparatively few men who know how to spray for insects so as to get the best results. With the majority, the operation is a more or less hit-or-miss affair, because they have not the necessary knowledge of insects and diseases to bring to bear upon their work, but are dependent upon prescriptions of so-called experts, or of real experts who, living at a distance, can spend only a little time at the locality where help is needed, or cannot make examination, and may err because of insufficient knowledge of the conditions in the locality. The importance therefore, of having men in each community who have at some

time specialized on insects and diseases and the methods of their control, and whose general interests are more or less bound up with the welfare of that community is apparent.

That Florida has long been in need of a nursery inspection law will be conceded by all who are interested in its horticultural development. The further spread of such pests as the Whitefly of citrus and San Jose Scale of peach and kindred trees, by means of infested nursery stock, is being rapidly checked thereby. The danger of spreading broadcast by means of nursery stock such insects and diseases as Cottony Cushion Scale, California Red Scale, and the Scaly Bark Disease of citrus, all of which are at present localized, or limited in distribution to perhaps two counties, has been reduced to a minimum. By requiring stock shipped into Florida from other States to be inspected and certified (as other States have for some time been requiring of Florida nurserymen), the risk of receiving dangerous insects and diseases on nursery stock from other States is greatly lessened. The regulation requiring all stock from foreign countries brought into Florida to be inspected for dangerous insects and diseases has practically eliminated the danger of receiving any more foreign pests such as Whitefly, San Jose Scale, Cottony Cushion Scale, Mango Scale, and Guava Scale.

That the Inspector frequently has the opportunity to impart information on insects and diseases and to advise with nurserymen and others how best to eradicate them or check their increase, is an educational feature of the work worthy of consideration.

The advantage of having the Inspector's office located in the Agricultural Experiment Station Building at the University cannot be overestimated. The desirability of the Inspector now and then supplementing his own technical and practical information on insects and diseases of plants by consulting with other specialists across the hall or across the University Campus is self-evident. It saves his time and adds to the efficiency of his service, by obviating the necessity of lengthy correspondence when he is in doubt about an insect or a disease. The General and Department Libraries of the University and Experiment Station contain many books, bulletins and other special papers on insects and diseases of plants, which it is frequently necessary and important to consult.

The publications of the office consist of Nursery Inspection Circulars to give information pertinent to the operation of the Law, Rules and Regulations, and other information intended to aid nurserymen and others in checking the spread of dangerous insects and diseases. Six circulars and one report have been published:

Circular 1 gives the Law with the Rules and Regulations.

Circular 2 is an announcement to the Press of the State.

Circular 3 gives Additional Rules and Regulations on the Mexican Cotton Boll Weevil, Mango Weevil, Irish Potatoes, Fruit Flies, and Exceptions to Rule 1 (Nursery Inspection Circular 1).

Circular 4 suspends Rules and Regulations, 34 to 38 (inclusive), on Irish Potatoes until April 1, 1913. (Now suspended indefinitely.)

Circular 5 discusses the desirability of buying only defoliated nursery stock.

Circular 6 is a bulletin on the Mexican Cotton Boll Weevil.

REGISTER

DEGREES, HONORS, AND MEDALS

1912-1913

DEGREES IN COURSE

Master of Arts in Education

Neal, Marvin Llewellyn, A.B., Emory College---Donnie, Fla.
O'Haver, Pleasant Clator, A.B., DePauw University---Palatka, Fla.

Master of Science

Davis, Albert Gainer, B.S., University of Florida---Chipley, Fla.
Loftin, Ulphian Carr, B.S.A., N. C. A. & M. College---Chapel Hill, N. C.
O'Byrne, Frank McCord, A.B., Miami University---Oxford, Ohio.

Bachelor of Arts

Douglass, Rhodes Clyde---Pensacola, Fla.
Elliott, Walter Gowan---Tampa, Fla.
Henderson, Charles William---Tampa, Fla.
Jarrell, Robert Lee---Kissimmee, Fla.
Laffitte, Lincoln Sydnor---Lloyd, Fla.
Leitner, Sumter ---Kissimmee, Fla.
Morgan, Louie Robert---Arcadia, Fla.
White, Robert Ray---Starke, Fla.
Wilson, Robert Borden---Bartow, Fla.

Bachelor of Arts in Education

Blanton, Robert Solter---Plant City, Fla.

Bachelor of Science

Casler, Eugene Terry---Jacksonville, Fla.

Bachelor of Science in Agriculture

Swartz, Howard Villeroy---Sanford, Fla.

Bachelor of Science in Civil Engineering

Rowlett, Caius Augustus---Palmetto, Fla.
Shands, Alvin Glen---Gainesville, Fla.
Thrasher, Leon Brooks---Micanopy, Fla.
Vidal, Albert ---Gainesville, Fla.

Bachelor of Science in Mechanical Engineering

Macintosh, Stuart ---London, England
Taylor, Earle Abbott---Gainesville, Fla.

Bachelor of Laws

Brooks, Arthur Cecil---Lake Butler, Fla.
Clayton, Orlando Jay---Aucilla, Fla.
Cox, Boyd Abel---Vernon, Fla.
DeVane, Enoch Clayborne---Plant City, Fla.
Diamond, Charles Peter---Cora, Fla.

Garrett, George Palmer---Kissimmee, Fla.
Gibson, James Bond, Jr.---River View, Fla.
Godwin, John Luther---Lyons, Ga.
Hocker, Frederick Roche---Ocala, Fla.
Householder, Ernest Ferguson---Manatee, Fla.
Kennedy, Walker McMillan---Umatilla, Fla.
Langston, Bernard Gainer, A.B., University of Florida---Chipley, Fla.
Lawler, Samuel Watson, Jr., A.B., Southern College---Tallahassee, Fla.
Magaha, Earnest Marion---Jay, Fla.
Mathis, Bascom Vernando---Bonifay, Fla.
McCaskill, James Marshall---Plant City, Fla.
Miller, Oscar Samuel, A.B., University of Florida---Folkston, Ga.
Phipps, Claibourne McC., A.B., University of Miss.---Terra Ceia, Fla.

CERTIFICATES

Two-Year Course in Agriculture

Means, David L.---Fort White, Fla.
Nieland, Louis Theodore---St. Johns, Fla.

PHI KAPPA PHI

Class of 1914

L. W. Alexander ---Law.
W. Blackman ---Law.
*H. G. Clayton ---Agriculture.
H. G. Conant ---Agriculture.
G. C. Crom ---Engineering.
W. H. Crom ---Engineering.
A. DeWinkeler ---Engineering.
R. L. Goulding ---Teachers.
F. W. L. Hill ---Engineering.
W. L. Hill ---Law.
A. W. Knight ---Law.
*C. A. Martini ---Agriculture.
P. D. Mobley ---Law.
P. R. Perry ---Law.
J. H. Peterson ---Law.
T. C. Ray ---Law.
W. H. Schulz ---Agriculture.
R. W. Shackleford ---Law.
J. R. Springer ---Agriculture.
*H. A. Thalimer ---Engineering.
L. W. Traxler ---Arts and Sciences.

Class of 1915

J. P. Hallowes ---Engineering.
S. P. Harn ---Agriculture.

PRIZES

Senior Oratorical Medal ---C. P. Diamond.
Junior Oratorical Medal ---N. A. Becker.
Declaimer's Medal ---L. M. Dow.
Buckman Medal ---F. L. Prescott.
U. D. C. Medal ---G. B. Knowles.
Callahan and Co's Law Prize ---O. J. Clayton.

*Elected in Junior year.

ROLL OF STUDENTS

1913-14

GRADUATE SCHOOL

Blanton, R. S., A.B. (University of Florida) ---------- Plant City
Education Hillsboro
Campbell, B. C., A.B. (Columbia University) ---------- Gainesville
Psychology Alachua
Cawthon, W. S., A.B. (University of Chicago) ---------- Gainesville
Mathematics Alachua
Christian, W. E., B.S. (University of Florida) ---------- McIntosh
Biological Sciences Marion
Mason, A. C., B.S. (Michigan Agrl. College) ---------- Saline
Biological Sciences Michigan
Rogers, J. McD., B.S. (Ohio State University) ---------- Madisonville
Agriculture Ohio
Swartz, H. V., B.S.A. (University of Florida) ---------- Sanford
Agriculture Seminole
Vuurens, William, B.S. (Wageninger Agrl. College, Holland)
Agriculture Dosterbeek, Holland

COLLEGE OF ARTS AND SCIENCES

Seniors

Name	*Postoffice*	*State or County*
Bird, T. B.	Monticello	Jefferson
Klingler, H. S.	Butler	Pennsylvania
Swanson, T. J.	Gainesville	Alachua
Traxler, L. W.	Alachua	Alachua
Williams, J. E.	Haskell	Polk
Williams, O. E.	Haskell	Polk

Juniors

Beeler, P. R.	Rock Hill	South Carolina
Brown, M. F.	Lawtey	Bradford
Campbell, A. D., Jr.	Chipley	Washington
Hearin, J. L.	Quincy	Gadsden
Helm, E. B.	Miami	Dade
Peeples, H. W.	Valdosta	Georgia
Reynolds, W. H.	Lakeland	Polk
Robertson, C. A.	Tallahassee	Leon
Terry, R. P.	Lakeland	Polk
Traxler, E. S.	Alachua	Alachua
Yarbrough, T. T.	Miccosukee	Leon

Sophomores

Bishop, B. O.	Gainesville	Alachua
Coarsey, J. M.	Tampa	Hillsboro
Jackson, A. C.	Micanopy	Alachua
Metcalf, L. W.	West Palm Beach	Palm Beach
McElya, N.	Gasparilla	DeSoto
Wood, P. W.	Tampa	Hillsboro

Freshmen

Name	*Postoffice*	*State or County*
Bracken, L. R.	Lakeland	Polk
Brown, G. W.	Lawtey	Bradford
Caswell, C. C.	St. Petersburg	Pinellas
Chillingsworth, C. E.	West Palm Beach	Palm Beach
Cone, A. J., Jr.	Gainesville	Alachua
Dyrenforth, L. Y.	Anona	Hillsboro
Hart, G.	Lakeland	Polk
Henderson, W. B.	Tampa	Hillsboro
Jackson, R. I.	Lakeland	Polk
Martsolf, A. L.	New Brighton	Pennsylvania
Merrick, R. G.	Baltimore	Maryland
McRae, W. A., Jr.	Baldwin	Duval
Oglesby, E. M,	Bartow	Polk
Padgett, E. L.	Jacksonville	Duval
Padgett, S. D.	Lake Butler	Bradford
Patterson, J. B.	Chaires	Leon
Rosenbusch, C. H.	Green Cove Springs	Clay
Street, W. E.	Denver	Colorado
Tillman, J. M.	Bartow	Polk
Wilson, E. F.	New Smyrna	Volusia
Yon, E. M.	Blountstown	Calhoun

Specials

Barrs, N.	Gainesville	Alachua
Barry, W. M.	Newberry	Alachua
Bishop, C. P.	Eustis	Lake
Burnett, P. H.	Bartow	Polk
Gamble, N. E., LL.B. (Yale)	DeLand	Volusia
Hancock, A. R.	Tallahassee	Leon
Hester, H. S.	Tampa	Hillsboro
Hodgson, W. M.	Tampa	Hillsboro
Livingston, J. S.	Boston	Massachusetts
Lotspeich, A. A.	Weaverville	North Carolina
Maguire, J. W.	Chicago	Illinois
Rosborough, D. Y.	Windsor	Alachua
Stewart, J. B.	Hilliard	Nassau
Taylor, W. H., Jr.	Greenwood	Jackson

COLLEGE OF AGRICULTURE

Seniors

Badger, D. M.	Minneapolis	Minnesota
Clayton, H. G.	Tampa	Hillsboro
Conant, H. G.	Minneapolis	Minnesota
Gist, J. F.	McIntosh	Marion
Grace, J. T.	Graceville	Jackson
Houghtaling, H. C.	New York	New York
Martini, C. A.	Van Wert	Ohio
McPherson, R. J.	Juniper	Gadsden
Miller, J. A.	Independence	Missouri
Shaw, A. G.	Ybor City	Hillsboro
Springer, J. R.	Pitman	New Jersey
Schulz, W. H., Jr.	Eau Claire	Wisconsin
Wilson, G. H.	Gainesville	Alachua

Juniors

Name	*Postoffice*	*State or County*
Hainlin, N. E.	Goulds	Dade
Halma, F.	Gainesville	Alachua
Harn, S. P.	Mooresville	Alabama
McDowall, C. D.	Gainesville	Alachua
Jackson, T. U.	Lakeland	Polk

Sophomores

Dukes, R. A.	Worthington	Bradford
Gleichman, M. I.	Largo	Pinellas
Grace, C. B.	Evinston	Alachua
Gunn, C. D.	Marianna	Jackson
Lord, H. N.	Ft. Pierce	St. Lucie
Nolan, F. E.	Lake Elmo	Minnesota
Pancoast, B. K.	Pitman	New Jersey
Weeden, F. R.	Tampa	Hillsboro

Freshmen

Armstrong, P. B.	Terra Ceia	Manatee
Beeler, D.	Rock Hill	So. Carolina
Briggs, W. R.	Zephyrhills	Pasco
Johnson, J. A.	St. Petersburg	Pinellas
Mann, C. M.	Fernandina	Nassau
Salvail, V. H.	Helena	Montana
Thompson, F. L.	Pensacola	Escambia

Special

Steil, F. H.	Sydney	Ohio

Middle Course

Bixbey, V. E.	Buffalo	New York
Jennings, B. A.	Cincinnatus	New York

Two-Year Course

Aber, H. W.	Eustis	Lake
Belzer, Theo.	Westville	Holmes
Bitterlich, J.	St. Louis	Missouri
Candler, W. A.	Clearwater	Pinellas
Dahm, O. B.	Haines City	Polk
Fielding, E.	Chicago	Illinois
Glegg, G. D.	Ruskin	Hillsboro
Hecker, F. J.	Century	Escambia
Kershaw, J. G.	Cocoa	Brevard
Lawless, J. L., Jr.	Ocklocknee	Leon
May, L. L. M.	Ocala	Marion
Meffert, F. G.	Quincy	Gadsden
Millidge, S.	Redland	Dade
Moore, J. E.	Haines City	Polk
McMullen, H. L.	Clearwater	Hillsboro
Nieland, C. J.	St. Johns Park	St. Johns
Nieland, E. R.	St. Johns Park	St. Johns
Nieland, F. C.	St. Johns Park	St. Johns
Owens, B. J.	Jacksonville	Duval
Webb, Q. C.	Cantonment	Escambia

One-Year Course

Name	*Postoffice*	*State or County*
Mathis, A.	Ponce de Leon	Holmes
Moss, E. R.	Espanola	St. Johns
McGarvey, F. C.	Lorain	Ohio
Oliphant, R. G.	Manatee	Manatee
Walker, G. J.	Gainesville	Alachua

Four-Week Course

Baker, Sydney F.	Lake Geneva	Clay
Bethea, G. W.	Athena	Taylor
Bonnett, Earl	Green Cove Springs	Clay
Cook, R. E. V.	Monticello	Jefferson
Hamilton, J. W.	Omaha	Nebraska
Hendry, V. W.	Perry	Taylor
Houck, L. D.	Fenholloway	Taylor
Houck, M.	Fenholloway	Taylor
Johnson, B. B.	Perry	Taylor
Kates, J. F.	Bonifay	Holmes
Lipscomb, B.	Fenholloway	Taylor
Rainy, J. S.	Mandarin	Duval

COLLEGE OF ENGINEERING

Seniors

Becker, N. A.	Jacksonville	Duval
Cappleman, H. L.	Ocala	Marion
Crom, G. C.	Gainesville	Alachua
Crom, W. H.	Gainesville	Alachua
DeWinkeler, A.	Arch Creek	Dade
Hill, F. W. L.	Narcossee	Osceola
LaRoche, C. C.	Cocoa	Brevard
McNeill, M. C.	Tallahassee	Leon
Parham, W. C.	Gainesville	Alachua
Price, J. C.	Warrenton	North Carolina
Riggins, L. W.	Lakeland	Polk
Swanson, F. M.	Gainesville	Alachua
Tenney, L. E.	Federal Point	Putnam
Thalimer, H. A.	DeFuniak Springs	Walton
White, D. L.	Citra	Marion

Juniors

Bailey, U. C.	Gainesville	Alachua
Blount, U. F.	Lakeland	Polk
Freeman, H. E.	Starke	Bradford
Hallowes, J. P.	Green Cove Springs	Clay
Hamilton, G. D.	Bartow	Polk
Joyner, R. L.	Roberts	Georgia
Ward, S. R.	Brooksville	Hernando
DesPland, L. A.	Daytona	Volusia

Sophomores

Davies, F. E.	West Palm Beach	Palm Beach
Hall, H. A.	Green Cove Springs	Clay
Holland, F. Leonard	Orlando	Orange

Name	Postoffice	State or County
Little, J. P.	Gainesville	Alachua
Moseley, G. R.	Gainesville	Alachua
Nelson, G. E.	Dunedin	Hillsboro
Peacock, A. J.	Bronson	Levy
Prescott, F. L.	Starke	Bradford
Sikes, J. F.	Punta Gorda	DeSoto
Spencer, L. P.	Palm Beach	Palm Beach
Stephens, T. M.	Charlotte Harbor	DeSoto
Taylor, Paul C.	Miami	Dade
VanCamp, R. K.	Punta Gorda	DeSoto
Whitmire, W. A.	Milton	Santa Rosa

Freshmen

Armstrong, P. B.	Terra Ceia	Manatee
Braymer, C. J.	Bradentown	Manatee
Clarke, L.	East Palatka	Putnam
Coile, R. M.	Bowling Green	DeSoto
Farrior, J. R.	Chipley	Washington
Hilton, T. H.	Melrose	Alachua
Himes, B. T.	West Palm Beach	Palm Beach
Holland, F. Lassiter	Bartow	Polk
Merrin, R. G.	Plant City	Hillsboro
Ramsdell, A. W.	Tampa	Hillsboro
Rosenthal, J.	Tampa	Hillsboro
Sweet, C. W.	Leesburg	Lake
West, D. E.	Monticello	Jefferson

Special

Peter, B. K.	Washington	Dist. of Columbia

COLLEGE OF LAW

Seniors

Name	Postoffice	State or County
Alexander, L. W.	Jacksonville	Duval
Arnold, A. C.	Jacksonville	Duval
Baxter, M.	Blacksbear	Georgia
Blackman, W., A.B. (Rollins College)	Winter Park	Orange
Buie, A. P.	Bell	Alachua
Bullock, J. R.	Ocala	Marion
Carter, H. B.	St. Augustine	St. Johns
Futch, L. E.	St. Petersburg	Pinellas
Henderson, R. A.	Fort Myers	Lee
Hill, W. L.	Gainesville	Alachua
Jackson, G. W.	St. Augustine	St. Johns
Jacobson, J. E., B.S. (University of Florida)	Jacksonville	Duval
Knight, A. W., Jr., A.B. (University of the South)	Jacksonville	Duval
Lischkoff, L. N.	Pensacola	Escambia
Mobley, P. D.	Punta Gorda	DeSoto
Moore, T. W.	Jacksonville	Duval
McGarry, P. D.	Jacksonville	Duval
Owens, F. E.	Eustis	Lake

Name	Postoffice	State or County
Perry, P. R.	St. Augustine	St. Johns
Peterson, J. H.	Lakeland	Polk
Poppell, J. C.	Starke	Bradford
Pruitt, T. P.	Tallahassee	Leon
Ray, T. C.	Marianna	Jackson
Robbins, R. P.	Titusville	Brevard
Shackleford, R. W., A.B. (University of Florida)	Tallahassee	Leon
Smith, T. H.	Marianna	Jackson
Sutton, J. B.	Lakeland	Polk
Taylor, R. R., Jr.	Miami	Dade
Welch, C. L.	Tampa	Hillsboro
Wiggins, E. E.	Hawthorn	Alachua
Wiggins, C. M.	Bartow	Polk
Wilder, A. D.	Orange	Liberty

Juniors

Barker, W. J.	Jacksonville	Duval
Boyer, C. A.	Jacksonville	Duval
Bryant, T. W., B.S. (University of Florida)	Lakeland	Polk
Carter, F. B., Jr.	Pensacola	Escambia
Dawson, C. R.	Jacksonville	Duval
Davis, H. F.	St. Augustine	St. Johns
Edge, L. D.	Groveland	Lake
Goldberg, R. A.	Madison	Madison
Groover, J. M.	Lakeland	Polk
Hale, Hugh	Brooksville	Hernando
Houston, Pat	Jacksonville	Duval
Jarrell, R. L., A.B.. (University of Florida)	Starke	Bradford
Johnson, Lee, B.S. (Ntl. Greek Academy of Constantinople)	Constantinople	Turkey
Key, R. G.	St. Petersburg	Pinellas
Leitner, S., A.B. (University of Florida)	Kissimmee	Osceola
Lotspeich, A. A.	Weaverville	No. Carolina
Maguire, R. F.	Ocoee	Orange
Moffat, V. R.	Miami	Dade
Newman, L. B.	Jacksonville	Duval
Oliphant, H. K., Jr.	Bartow	Polk
Pacetti, T. A.	St. Augustine	St. Johns
Price, T. E.	Marianna	Jackson
Pyle, G. E.	Gainesville	Alachua
Rabinovic, A. M.	Tampa	Hillsboro
Rush, H. L.	Gainesville	Alachua
Sawyer, H. S., A.B. (Guilford College)	Merritt	No. Carolina
Slagle, Dean	Berea	Kentucky
Stevens, A. B.,	St. Petersburg	Pinellas
Stewart, J. B.	Hilliard	Nassau
Trammell, C. C.	Lakeland	Polk
Upchurch, F. D.	Jacksonville	Duval
White, R. R., A.B. (University of Florida)	Starke	Bradford

Name	Postoffice	State or County
Wilson, B. C.	Bartow	Polk
Wilson, M. R.	Palmetto	Manatee

Specials

Barrs, N.	Gainesville	Alachua
Johns, E. M.	Starke	Bradford
Knowles, G. B.	Greenwood	Jackson
Meredith, B. F.	Fort Myers	Lee
Shoemaker, J. E.	Gainesville	Alachua
Shuman, J. H.	Monticello	Jefferson
Soloman, B. L.	Marianna	Jackson
Slater, A. L., A. B. (Rollins' College)	St. Augustine	St. Johns
Thompson, Harry, B.S. (University of Florida)	Gainesville	Alachua
Waits, W. H.	Gainesville	Alachua
Williams, J. E.	Haskell	Polk

TEACHERS COLLEGE AND NORMAL SCHOOL

Seniors

Goulding, R. L.	Pensacola	Escambia

Juniors

Barber, B. D.	Tallahassee	Leon
DeWolf, H. L.	Cresent City	Putnam
Embry, W. E.	Dade City	Pasco
Knowles, G. B.	Greenwood	Jackson
Mason, Fred R.	Macclenny	Baker
Poppell, J. T.	New River	Bradford

Sophomores

Adams, B. D.	Gainesville	Alachua
Blackburn, L. L.	Gainesville	Alachua
Blood, Hattie	Mulberry	Polk
Bauskett, Sophie	Jacksonville	Duval
Boswell, Fannie	St. Petersburg	Pinellas
Bouknight, Olga K.	Micanopy	Alachua
Boulware, R. S.	Island Grove	Alachua
Bowman, Luella	Mulberry	Polk
Bowman, Louise	Mulberry	Polk
Brachhold, Margaret	Daytona Beach	Volusia
Brachhold, Elizabeth	Daytona Beach	Volusia
Bradford, Gladys	Dade City	Pasco
Brice, V. R.	Island Grove	Alachua
Bryant, Eva	Lakeland	Polk
Brown, Lynette	Miami	Dade
Caldwell, Hattie	Dade City	Pasco
Churchill, Frank	Webster	Sumter
Clayton, Susie	McClenny	Baker
Colclough, Lillian	Gainesville	Alachua
Collins, J. W.	Ft. White	Columbia
Collins, Mrs. J. W.	Ft. White	Columbia
Combs, A. W.	Alva	Lee
Corey, Lorraine	Fellsmere	St. Lucie
Corr, Alys	Dade City	Pasco

Name	Postoffice	State or County
Cox, C. S.	Mulberry	Polk
Glidewell, J. H.	Tampa	Hillsboro
Hollingsworth, C. I.	Lakeland	Polk
McCall, T. E.	Jasper	Hamilton
Wilson, W. D.	Westville	Holmes

Freshmen

Browning, J.	Francis	Putnam
Green, R. A.	New River	Bradford
Hutchinson, A. K.	Palatka	Putnam

Irregular

Crofton, L. C.	Vernon	Washington
Hartsfield, J. E.	Gainesville	Alachua
Miles, F. D.	Vernon	Washington
Rosborough, D. Y.	Windsor	Alachua

NORMAL SCHOOL

Barber, R. T.	Morristown	Levy
Durrance, F. Y.	Arcadia	DeSoto
Cogburn, P. H.	Cottondale	Jackson
Echols, H.	Jay	Santa Rosa
Green, C. D.	McAlpin	Suwannee
Haltiwanger, R. N.	Gainesville	Alachua
Hatcher, F.	Frisco	Oklahoma
Johns, H. L.	Lakeland	Polk
Lipsey, J. J.	Trilby	Pasco
McAlpin, I. M.	Mayo	Lafayette
Neal, C. R.	Gainesville	Alachua
Roberts, W. L.	Live Oak	Suwannee
Robinson, T. R., Jr.	Milton	Santa Rosa
Long, W. C.	Mayo	Lafayette
Turner, E. P.	Trenton	Alachua

Spring Review Course

Carter, W. L.	Waukeenah	Jefferson
Colson, A. L.	Bell	Alachua
Duggar, J. D.	Glen St. Mary	Baker
Sowell, C.	West Lake	Hamilton
Walker, Chris.	Glen St. Mary	Baker

UNIVERSITY SUMMER SCHOOL (Co-Educational)

(1913)

Anderson, Hildur	Miami	Dade
Baker, Sadie	Key West	Monroe
Baldwin, Florence	Archer	Alachua
Barry, Gallie	Bronson	Levy
Baskin, J. H.	Gainesville	Alachua
Belcher, Francis	Largo	Pinellas
Bennett, Pearl	DeLand	Volusia
Bessent, Fay	Starke	Bradford
Biaza, Isabel	Key West	Monroe
Bishop, Millicent	Gainesville	Alachua
Blake, Anna May	Tampa	Hillsboro

Name	*Postoffice*	*State or County*
Dampier, Johnnie	Hague	Alachua
Darby, Emma	Starke	Bradford
Davis, E. M.	Starke	Bradford
Davis, Grace	Newberry	Alachua
Dawkins, Mary	Gainesville	Alachua
Dean, Carrie	Gainesville	Alachua
Dorsey, Annie	Gainesville	Alachua
Draper, S. A.	Lake Butler	Bradford
Dudley, Edna	Newberry	Alachua
Edmunds, Nellie	St. Augustine	St. Johns
Emerson, Grace	Apopka	Seminole
Ferson, Mrs. B. M.	Eden	St. Lucie
Foland, Ida	Levon	Marion
Forbes, Mary	Anthony	Marion
Gatchell, Pauline	St. Augustine	St. Johns
Gautt, Mrs. Beatrice	Trenton	Alachua
Gill, James	Anthony	Marion
Gill, Ruth	Anthony	Marion
Gracey, Gladys	Gainesville	Alachua
Hall, Emma V.	Fellsmere	St. Lucie
Harrison, Edythe	Gainesville	Alachua
Hart, Mary	Gainesville	Alachua
Hayes, J.	Webster	Sumter
Hayes, M. S.	Brooker	Bradford
Hepburn, Lucy	Jupiter	Palm Beach
Highsmith, Geneva	Arcadia	DeSoto
Holder, A. E.	Alachua	Alachua
Hudgins, Rebecca	Hawthorne	Alachua
Jordan, Miss	Davenport	Polk
Kilgore, Rosa	Largo	Pinellas
Kohten, Regina	Tillman	Brevard
Kohten, Elizabeth	Tillman	Brevard
Lambert, Clarence	Island Grove	Alachua
Lambert, Pauline	Sparr	Marion
Landrum, C. A.	Newberry	Alachua
Lee, Belle	Gainesville	Alachua
Lee, Winnifred	Gainesville	Alachua
Long, C. W.	Mayo	Lafayette
Lord, Ada Spero	Key West	Monroe
Lowe, Hilda	Key West	Monroe
Lynch, W. H.	Gainesville	Alachua
Maines, Mrs. O. M.	Orlando	Orange
Martin, Bernice	Island Grove	Alachua
May, Hannah	St. Petersburg	Pinellas
McCall, A. C.	Gainesville	Alachua
McClinton, Annie	Ft. White	Columbia
McRae, Alice	Evinston	Marion
McRae, Mary	Lakeland	Polk
Mercer, S. P.	Zolfo	DeSoto
Mercer, Mrs. S. P.	Zolfo	DeSoto
Mixson, H. J.	Williston	Levy
Murphree, Alberta	Gainesville	Alachua
Newman, Madge	Lakeland	Polk
Nichols, Annie May	Pedro	Marion
Pedrick, Douglas	Gainesville	Alachua
Perez, Dora	Key West	Monroe

Name	*Postoffice*	*State or County*
Perry, Irene	Gainesville	Alachua
Peters, Georgia	Plant City	Hillsboro
Phifer, Helen	Gainesville	Alachua
Pickren, Mrs. J. J.	Palatka	Putnam
Pledger, Edith	Manatee	Manatee
Plumb, Kathleen	Belle Air	Pinellas
Pratt, Nettie	Manatee	Manatee
Prevatt, Bernice	Gainesville	Alachua
Proctor, Jewell	Pedro	Marion
Register, Lee	Plant City	Hillsboro
Reid, Lillian	Newberry	Alachua
Reinoehl, Sophie	Jacksonville	Duval
Ricks, Ruby	Gainesville	Alachua
Roberts, A. K.	Wellborn	Suwannee
Roberts, Clarise	Key West	Monroe
Roberts, Grace	Key West	Monroe
Roberts, J. P.	Wellborn	Suwannee
Roberts, Julia	Key West	Monroe
Roberts, Walter	Wellborn	Suwannee
Russell, M. E.	Key West	Monroe
Russell, Medora	Kissimmee	Osceola
Salter, Kathleen	Brooksville	Hernando
Seacole, Mabel	Eustis	Lake
Sealey, R. M.	Ft. Myers	Lee
Seymour, Alta	Summerfield	Marion
Shaw, R. C.	Island Grove	Alachua
Simmons, E. R.	Gainesville	Alachua
Smith, S. A.	Mulberry	Polk
Solomon, Louise	Key West	Monroe
Sparkman, John	Webster	Sumter
Stevens, W. H.	Dade City	Pasco
Stewart, Clara	Eau Gallie	Brevard
Stewart, Gertrude	Eau Gallie	Brevard
Strickland, Alice	Waldo	Alachua
Sumner, Glenn	St. Petersburg	Pinellas
Syfrett, J. M.	Gainesville	Alachua
Taylor, Mayme	Oak Hill	Brevard
Thomas, Clara	Gainesville	Alachua
Tomkies, Kate	Gainesville	Alachua
Torano, Emma	Key West	Monroe
Touchstone, Beulah	Homeland	Polk
Treadwell, Annie	Gainesville	Alachua
Turner, Mabel	Auburndale	Polk
Watson, T. L.	Ft. Meade	Polk
Wells, Orian	Gainesville	Alachua
Wells, Ellen	Cocoa	Brevard
White, Florrie	Hague	Alachua
Williams, G. H.	Waldo	Alachua
Woolf, Madula	Arcadia	DeSoto
Zellner, E. A.	Floral City	Citrus

PRACTICE HIGH SCHOOL

Fourth Year

Baskin, J. H.	Gainesville	Alachua
Battle, F. S.	Sorrento	Lake

Name	*Postoffice*	*State or County*
Brannon, C. S.	Ocoee	Orange
Freeman, E. W.	Starke	Bradford
Glazier, G. M.	Oneco	Manatee
Hill, J. R.	Coleman	Sumter
Johnson, C. L.	Coleman	Sumter
Lee, R. E.	Gainesvillle	Alachua
Levis, N. K.	St. Petersburg	Pinellas
Liddon, C. C.	Marianna	Jackson
Long, C. W.	Mayo	Lafayette
Lowe, P. R.	Anona	Hillsboro
Marshburn, F. B.	Bronson	Levy
McAlpin, I. M.	Mayo	Lafayette
McMullen, P. R.	Largo	Pinellas
Patterson, J. B.	Chaires	Leon
Stillson, G. A.	St. Petersburg	Pinellas
Willis, E. M.	Williston	Levy
Wood, H. M.	Evinston	Alachua
Wyckoff, J. S., Jr.	Citra	Marion
Zetrouer, H. F.	Rochelle	Alachua

Third Year

Bean, C. S.	Bronson	Levy
Cannon, E. F.	Gainesville	Alachua
Carleton, W. J.	Kings Ferry	Nassau
Clyatt, G. C.	Micanopy	Alachua
Duncan, W. S.	Tavares	Lake
Frisbee, L. R.	Middleburg	Clay
Futch, E. C.	Dade City	Pasco
Gist, J. V.	Goulds	Dade
Graham, G. R.	Fort White	Columbia
Graham, R. D.	Piedmont	West Virginia
Gray, L. A.	Hinson	Gadsden
Harvey, P. J.	Williston	Levy
Hatchedorian, Dicran	Constantinople	Turkey
Hodgson, A. M.	Eau Gallie	Brevard
Johnson, B. B.	Genoa	Hamilton
Jordan, W. H.	Jacksonville	Duval
Knights, K. K.	Dupont	St. Johns
Lea, B. E.	St. Augustine	St. Johns
Lockey, A. H.	Esto	Holmes
Lowe, V. E.	Anona	Hillsboro
Lynch, W. H.	Gainesville	Alachua
Means, H. G.	Fort White	Columbia
Merren, F. G.	Plant City	Hillsboro
McElya, Will	Gainesville	Alachua
McIntosh, A. P.	Brooksville	Hernando
Peacock, Drew	Altha	Calhoun
Pedrick, D.	Gasparilla	DeSoto
Redstone, H. G.	Eau Gallie	Brevard
Register, I. L.	Plant City	Hillsboro
Stoutamire, R.	Tallahassee	Leon
Surrency, J. K.	Bowling Green	DeSoto
Toomer, W. H., Jr.	Jacksonville	Duval
Turner, G. F.	Gaiter	Marion

SUMMARY

Graduate School		8
College of Arts and Sciences		58
College of Agriculture		
a. College	34	
b. Middle Course	2	
c. Two-Year Course	20	
d. One Year Special Course	5	
e. Four-Weeks Course for Farmers	12	
		73
College of Engineering		51
College of Law		77
Teachers College and Normal School		
a. College	20	
b. Normal School	15	
c. Spring Review Course	5	
d. Summer School	140	
e. Practice High School	54	
		230
Total Enrolment for 1913-14		501
Counted twice		12
Net total		489

SUMMARY BY STATES AND FOREIGN COUNTRIES

Alabama	1
Colorado	1
District of Columbia	1
Florida	447
Georgia	3
Holland	1
Illinois	2
Kentucky	1
Maryland	1
Massachusetts	1
Michigan	1
Minnesota	3
Montana	1
Missouri	2
Nebraska	1
New Jersey	2
New York	3
North Carolina	4
Ohio	4
Oklahoma	1
Pennsylvania	2
South Carolina	2
Turkey	2
West Virginia	1
Wisconsin	1
Net Total	489

SUMMARY BY COUNTIES

Alachua	92
Baker	4
Bradford	18
Brevard	11
Calhoun	2
Citrus	1
Clay	6
Columbia	5
Dade	10
DeSoto	13
Duval	21
Escambia	6
Gadsden	4
Hamilton	3
Hernando	4
Hillsboro	26
Holmes	5
Jackson	11
Jefferson	5
Lafayette	5
Lake	8
Lee	4
Leon	12
Levy	7
Liberty	1
Madison	1
Manatee	8
Marion	17
Monroe	11
Nassau	4
Orange	5
Osceola	3
Palm Beach	6
Pasco	8
Pinellas	16
Polk	40
Putnam	6
St. Johns	14
St. Lucie	4
Santa Rosa	3
Seminole	2
Sumter	5
Suwannee	5
Taylor	6
Volusia	6
Walton	1
Washington	4
Total from forty-seven Florida Counties	459
Other States and Foreign Countries	42
Total	501
Counted twice	12
Net total	489

Page
B.S.E.E. Curriculum ---- 105
B.S.M.E. Curriculum ---- 105
Breeding History ---- 93
Breeds of Animals ---- 91
Buildings ---- 18
Buildings, Roads, Irrigation and Drainage ---- 89
Buttermaking, Farm ---- 94
Cabinet Work ---- 116
Calendar ---- 6
Canning Clubs ---- 170
Carpentry ---- 115
Carving, Wood ---- 116
Certificates ---- 95, 97, 133, 150
Certificates, County ---- 140, 154
Certificates, State ---- 133, 154
Changes in Studies ---- 30
Charges, University ---- 32
Chemistry ---- 46, 60, 139, 148
Child Study ---- 137
Citrus, Culture, &c. ---- 90
City Milk Supply ---- 94
Civil Engineering ---- 110
Civil Engineering Curriculum (See B.S.C.E. Curriculum)
Classical Course (See A.B. Curriculum)
Clubs, Student (See Student Organizations)
College of Agriculture ---- 74
College of Arts and Sciences ---- 50
College of Engineering ---- 103
College of Law ---- 119
College, Teachers ---- 131
College Farm ---- 76
Committees, Standing ---- 13
Computing Room ---- 24
Conditions ---- 29
Co-operative Demonstration Work, Farmers' ---- 167
Contracts ---- 112
Corn Clubs, Boys' ---- 170
Correspondence Courses ---- 101, 110, 150
Council, University ---- 8, 26
County Certificates ---- 140, 154
Course of Instruction, College of Law ---- 124
Crops, Field and Forage ---- 87, 88
Dairying ---- 93
Deciduous Fruits ---- 90
Degrees (See under the various Colleges)
Demonstration Agents, School for ---- 170
Demonstration Work, Farmers' Co-operative ---- 167
Descriptive Geometry ---- 114
Descriptive Geometry Problems ---- 115
Design, Machine ---- 115
Discipline ---- 27
Dissertation ---- 49
Drawing ---- 115
Draughting Room ---- 24
Earning Expenses, Opportunities for ---- 36, 81
Economics ---- 65

INDEX

	Page
A.B. Curriculum	53
A.B. Curriculum in Education	135
A.B. in Education	134
Addresses, University	13
Administration	26
Admission	39, 46
Admission to the Bar	123
Advanced Standing	46, 121
Agents, Farmers' Co-operative Demonstration Work	167
Agricultural Club	38, 77
Agricultural Curriculum	82
Agricultural Economics	65
Agricultural Education	89
Agricultural Engineering	88
Agricultural Equipment	24
Agricultural Experiment Station	172
Agricultural Hall	76
Agricultural Meetings	100
Agricultural Seminar	89
Agriculture	45, 139, 146
Agriculture, College of	74
Agriculture, Middle Course in	97
Agriculture, Short Courses in	97
Agronomy	87
Agronomy, Equipment	77
Alligator, The Florida	39
Alumni Association	37
American Horticulture, Development of	91
Ancient Languages	55
Animal Breeding	92
Animal Conformation	93
Animal Diseases	92
Animal Feeding	92
Animal Husbandry	91
Animal Husbandry, Equipment	78
Animal Hygiene	92
Animal Nutrition	93
Animals, Types of	91
Astronomy	67
Athletic Equipment	25
Athletics	30, 157
Bacteriology	59
Band	14
Beef Production	92
Biblical Instruction	56
Biology	58
Board (See Expenses)	
Board of Control	8, 26
Board of Education, State	8
Books	34, 123
Botany	46, 59, 138
B.S. Curriculum	54
B.S.C.E. Curriculum	105
B.S. Curriculum in Agriculture	80, 82
B.S. Curriculum in Education	135

Page
Education ---- 89, 136, 146
Education, Curriculum in ---- 85, 135
Education, Secondary ---- 15
Electrical Engineering ---- 112
Electrical Engineering Curriculum ---- 108
Employment Bureau, Teachers' ---- 151
Endowment ---- 21
Engineering Curriculum ---- 106
Engines ---- 114
English ---- 41, 138, 146
English Language and Literature ---- 62
Entrance Requirements ---- 39
Equipment ---- 21, 76
Examinations ---- 30, 121
Expenses ---- 32, 99
Experiment Station, Agricultural ---- 172
Expression ---- 156
Extension Teaching ---- 89
Faculty ---- 9, 26, 50, 74, 103, 119, 131
Farm ---- 76
Farm Accounts ---- 88
Farm Buttermaking ---- 94
Farm Machinery ---- 88
Farm Management ---- 88
Farm Motors ---- 88
Farmers' Co-operative Demonstration Work ---- 167
Feeding, Animal ---- 92
Fees ---- 32
Fellowships ---- 34
Fertilizers ---- 87
Field Crops ---- 87
Forage Crops ---- 88
Forestry ---- 91
Forge ---- 116
Foundry ---- 116
French ---- 44, 68, 139, 146
Furniture Construction ---- 116
Gardening Clubs ---- 170
Gardening, Landscape ---- 91
Gas Engines ---- 114
Gears, Valve ---- 113
Geography, Physical ---- 45
Geology ---- 59
Geometry, Descriptive ---- 114
German ---- 45, 69, 139
Gifts to the University ---- 15, 78
Glee Club ---- 38
Government ---- 26
Grades ---- 30
Graduate in Farming ---- 94
Graduate School ---- 48
Graphic Statics ---- 111
Graphic Statics of Machinery ---- 113
Grasses ---- 88
Greek ---- 56
Greenhouse Management ---- 90

Page
Grounds ---------- 18
Groups ---------- 52, 83
Gymnastics ---------- 157
Hazing ---------- 27
Heat Engines ---------- 114
High School Inspection, State ---------- 150
High School, Practice ---------- 148
History ---------- 43, 64, 139, 147
History of American Horticulture ---------- 91
History of the University ---------- 16
Honors ---------- 31, 182
Horticultural Equipment ---------- 80
Horticulture ---------- 89
Husbandry, (See Animal Husbandry)
Hydraulics ---------- 111
Hygiene, Animal ---------- 92
Infirmary ---------- 32
Inspection, State High School ---------- 150
Inspection, State Nursery Stock ---------- 178
Institutes, Farmers,' &c. ---------- 159, 170
Irregular Students ---------- 29
Kelvin Engineering Club ---------- 38
Kinematics of Machinery ---------- 113
Laboratories ---------- 22
Landscape Gardening ---------- 91
Latin ---------- 44, 55, 147
Law, College of ---------- 119
Law, Rural ---------- 88
Lecturers, special ---------- 75, 103, 119
Library ---------- 21, 76, 122
Literary Courses (See A.B. Curriculum)
Literary Societies ---------- 37
Literature, English ---------- 43, 62
LL.B. Curriculum ---------- 125
Location ---------- 18
Lodging (See Expenses)
Machine Design ---------- 115
Machine Shop ---------- 116
Machinery, Farm ---------- 88
Machinery, Graphic Statics of ---------- 113
Machinery, Kinematics of ---------- 113
Management ---------- 136
Management, Farm ---------- 88
Mandolin Club ---------- 38
Manual Training ---------- 147
Manual Training (See Mechanic Arts)
Marshall Debating Society ---------- 123
Materials, Strength of ---------- 114
Mathematics ---------- 43, 66, 138, 148
Mechanic Arts ---------- 117
Mechanic Arts Curriculum ---------- 117
Mechanical Engineering ---------- 113
Mechanical Enginering Curriculum ---------- 109
Mechanical Technology ---------- 117
Mechanism ---------- 113
Mechanics ---------- 114

Page
Medals ---------- 32, 182
Methods ---------- 89, 136
Meetings, Agricultural ---------- 100
Middle Course in Agriculture ---------- 94
Military Organization ---------- 14
Military Science and Tactics ---------- 67
Milk Supply, City ---------- 94
Modern Languages ---------- 44, 68
Motors, Farm ---------- 88
Municipal Engineering ---------- 111
Museum ---------- 21
Music ---------- 156
Normal Course Curriculum ---------- 144
Normal School ---------- 140
Nursery Stock, State Inspection of ---------- 178
Nutrition, Animal ---------- 93
Officers of the University ---------- 9, 27
Organization ---------- 47
Patternmaking ---------- 116
Peabody Club ---------- 38
Pedagogy (See Education)
Phi Kappa Phi ---------- 31, 183
Philosophy ---------- 69
Physical Culture ---------- 157
Physical Geography ---------- 45
Physics ---------- 46, 72, 139, 148
Physics, Soil ---------- 87
Plant Breeding ---------- 90
Plant Propagation ---------- 90
Political Science ---------- 65
Poultry Culture ---------- 92
Poultry Practice ---------- 93
Practice High School ---------- 148
Practice Teaching ---------- 137
Prizes ---------- 31, 183
Professional Course, Teachers College ---------- 142
Projections ---------- 114
Propagation, Plant ---------- 90
Property, Value of ---------- 20
Public Speaking ---------- 156
Publications ---------- 39, 166, 173, 181
Psychology ---------- 70, 136
Railroads ---------- 111
Register ---------- 183
Regulations ---------- 26
Regulations Concerning Studies ---------- 28
Reports ---------- 30
Review Courses, Spring ---------- 140
Roll of Students ---------- 184
Rural Law ---------- 88
Scholarships ---------- 15, 35, 77
School for Demonstration Agents ---------- 170
School, Graduate ---------- 48
School Management ---------- 136
School Supervision ---------- 136
School, University Summer ---------- 152

Page
Science ---- 148
Science, Political ---- 65
Sciences, Social ---- 64
Scientific Courses (See B.S. Curricula).
Secondary Education ---- 15
Seminar ---- 89, 93
Seminole ---- 39
Shops ---- 25
Short Courses in Agriculture ---- 97
Short Courses in Mechanic Arts ---- 117
Social Sciences ---- 64
Societies, Student ---- 37
Sociology ---- 65
Soil Physics ---- 87
Spanish ---- 45, 69, 148
Speaking, Public ---- 156
Special Students ---- 46, 120
Specifications ---- 112
Spring Review Courses ---- 140
State Certificates ---- 133, 154
State High School Inspection ---- 150
State Inspection, Nursery Stock ---- 178
Strength of Materials ---- 114
Structural Engineering ---- 112
Student Organizations and Publications ---- 37
Subjects of Study ---- 52
Summary of Roll of Students ---- 195
Summer School, University ---- 152
Supervision, School ---- 136
Surveying ---- 110
Surveying Instruments ---- 25
Swine Production ---- 92
Tactics, Military ---- 67
Teachers College ---- 131
Teaching Agriculture, Methods of ---- 89
Technology, Mechanical ---- 117
Training, Manual ---- 147
Transit Club ---- 38
Trucking ---- 90
Tuition Fees ---- 32
Turning, Wood ---- 115
Types of Animals ---- 91
Uniform ---- 33
Unit Courses ---- 41
University Addresses ---- 13
University Charges ---- 32
University Council ---- 8, 26
University Extension ---- 158
University, Officers ---- 9
University Summer School ---- 152
Valve Gears ---- 113
Wood Carving ---- 116
Wood Turning ---- 115
Wood Working ---- 115
Y. M. C. A. ---- 37
Zoology ---- 46, 58

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CONTENTS

	Page
CALENDARS	6
BOARD OF CONTROL	8
STATE BOARD OF EDUCATION	8
UNIVERSITY COUNCIL	8
OFFICERS OF THE UNIVERSITY	9
STANDING COMMITTEES	12
MILITARY ORGANIZATION	13

GENERAL INFORMATION

GIFTS	14
HISTORY	14
LOCATION	17
GROUNDS AND BUILDINGS	17
ENDOWMENT	19
EQUIPMENT	20
Library	20
Museum	20
Laboratories	21
Agricultural Equipment	23
Surveying Instruments	23
Shops	23
Athletic Equipment	24
GOVERNMENT AND REGULATIONS	24
HONORS	30
STATEMENT OF EXPENSES	30
University Charges	30
Fellowships	33
Scholarships	33
Opportunities for Earning Expenses	34
ALUMNI ASSOCIATION	35
STUDENT ORGANIZATIONS AND PUBLICATIONS	36
ADMISSION	36
Terms	36
Methods	36
Advanced Standing	44
Special Students	44

ORGANIZATION

GRADUATE SCHOOL	
Degrees Offered	46
Prerequisite Degrees	46
Requirements for the Master's Degree	46

PAGE

COLLEGE OF ARTS AND SCIENCES

FACULTY 48
GENERAL STATEMENT 48
CURRICULA 50
DEPARTMENTS OF INSTRUCTION 52
Ancient Languages 52
Courses in Latin 52
Courses in Greek 53
Biblical Instruction 53
Biology and Geology 54
Courses in Zoology 55
Courses in Bacteriology 55
Course in Geology 56
Botany 56
Chemistry 57
English Language and Literature 59
History and Economics 61
Courses in History 61
Courses in Economics 62
Mathematics and Astronomy 63
Military Science and Tactics 64
Modern Languages 65
Courses in French 66
Courses in German 66
Courses in Spanish 67
Philosophy 67
Physics 69
Sociology and Political Science 70
Courses in Sociology 70
Courses in Political Science 71

COLLEGE OF AGRICULTURE

FACULTY 72
GENERAL STATEMENT 72
CURRICULA 78
DEPARTMENTS OF INSTRUCTION 83
Agronomy and Agricultural Engineering 83
Agricultural Education 85
Horticulture 85
Animal Husbandry and Dairying 86
MIDDLE COURSE IN AGRICULTURE 91
SHORT COURSES IN AGRICULTURE 94
CORRESPONDENCE COURSES 97
AGRICULTURAL MEETINGS 99

PAGE

COLLEGE OF ENGINEERING
FACULTY 100
GENERAL STATEMENT 100
CURRICULA 103
DEPARTMENTS OF INSTRUCTION 107
Civil Engineering 107
Electrical Engineering 109
Mechanical Engineering 110
Mechanic Arts 112

COLLEGE OF LAW
FACULTY 116
GENERAL STATEMENT 116
CURRICULUM 120

TEACHERS COLLEGE AND NORMAL SCHOOL
FACULTY 127
GENERAL STATEMENT 127
TEACHERS COLLEGE 129
CURRICULUM 130
DEPARTMENTS OF INSTRUCTION 131
NORMAL SCHOOL 135
PRACTICE HIGH SCHOOL 143
CORRESPONDENCE COURSES 145
STATE HIGH SCHOOL INSPECTION 145
TEACHERS' EMPLOYMENT BUREAU 145
UNIVERSITY SUMMER SCHOOL 146

SPECIAL DEPARTMENTS
Expression and Public Speaking 149
Music 149
Physical Culture and Athletics 150

DIVISION OF UNIVERSITY EXTENSION
STAFF 151
GENERAL STATEMENT 153
FARMERS' COOPERATIVE DEMONSTRATION WORK 154
BOYS' CORN CLUBS 156
GIRLS' CANNING CLUBS 157
FARMERS' INSTITUTES 159
CORRESPONDENCE COURSES 166

AGRICULTURAL EXPERIMENT STATION
STAFF 167
GENERAL STATEMENT 167

STATE NURSERY STOCK INSPECTION 170

REGISTER

DEGREES, HONORS AND MEDALS 172
ROLL OF STUDENTS 174
SUMMARY 187

UNIVERSITY CALENDAR

1915-1916

1915—June 14, *Monday*.....Summer School begins.
August 6, *Friday*.....Summer School ends.
September 20, *Monday*.....Summer Recess ends.
Examinations for Admission.
Registration of Students.
September 21, *Tuesday*.....First Semester begins.
October 2, *Saturday, 1:30 p. m.*.....Re-examinations.
2:30 p. m......Meeting of General Faculty.
November 25, *Thursday*.....Thanksgiving Holiday.
December 18, *Saturday, 11:30 a. m.*..Christmas Recess begins.
1916—January 1, *Saturday*.....Christmas Recess ends.
January 3, *Monday*.....Resumption of Classes.
Review Course for Teachers begins.
January 11, *Tuesday*.....Ten-Day Course for Farmers begins.
January 29, *Saturday*.....First Semester ends.
January 31, *Monday*.....Second Semester begins.
February 12, *Saturday, 2:30 p. m.*...Meeting of General Faculty.
March 4, *Saturday, 1:30 p. m.*.....Re-examinations.
June 3, *Saturday, 2:30 p. m.*.....Meeting of General Faculty.
June 4 to 6.....Commencement.
June 4, *Sunday*.....Baccalaureate Sermon.
June 5, *Monday*.....Oratorical Contests.
Annual Alumni Meeting.
June 6, *Tuesday*.....Graduating Day.
June 7, *Wednesday*.....Summer Recess begins.
June 9, *Friday*.....Examinations for Admission.
June 12, *Monday*.....Summer School begins.

1915 CALENDAR 1916

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*Absent on leave.

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Professors Davis, Crow, Floyd, and Crandall.

PUBLICITY
Professors Trusler, Willoughby, Crow, Thoroughgood, and Mr. Hathaway.

SCHEDULE
Professors Wiechardt, Flint, Thackston, and Vernon.

SELF-HELP
Professors Floyd, Wiechardt, Anderson, and Buchholz.

STUDENT ORGANIZATIONS
Professors Keppel, Cox, Hughes, and Thoroughgood.

UNIVERSITY PUBLICATIONS
Professors Crow, Benton, Farr, and Trusler.

MILITARY ORGANIZATION

MAJOR E. S. WALKER, U. S. A., *Retired,*
Professor of Military Science and Tactics.

FIELD, STAFF AND NON-COMMISSIONED STAFF

N. MCELYA.....*Major*
A. C. JACKSON.....*First Lieutenant and Quartermaster*
J. A. JOHNSON.....*Second Lieutenant and Adjutant*
J. M. TILLMAN.....*Sergeant Major*
S. D. PADGETT.....*Color Sergeant*

Company "A."	*Company "B."*	*Company "C."*
	CAPTAINS	
G. R. MOSELEY	B. K. PANCOAST	R. K. VAN CAMP
	FIRST LIEUTENANTS	
C. D. GUNN	H. A. HALL	R. A. DUKES
	SECOND LIEUTENANTS	
E. M. YON	C. J. BRAYMER	A. W. RAMSDELL
	FIRST SERGEANTS	
C. C. CASWELL	C. M. MANN	J. R. FARRIOR
	SERGEANTS	
P. W. WOOD	A. L. REID	G. E. NELSON
T. M. STEPHENS	M. HELLER	E. E. RICH
J. B. GRACY	W. B. HENDERSON	B. E. BUSHNELL
J. ROSENTHAL	C. W. STEBBINS	A. F. JONES
	CORPORALS	
J. T. COWSERT	H. F. ZETROUER	C. W. SWEET
J. K. GOLDSBY	H. C. GORDON	G. R. BAILEY
F. A. SEYMOUR	W. H. HAYFORD	F. R. EDWARDS
M. E. RUSSELL	H. D. PADGETT	R. A. D. MCKAY
T. J. BARNS	W. F. PERRY	P. R. MCMULLEN
	FIELD MUSIC	
C. B. GRACE	H. E. WOOD	D. S. KNIGHT

BAND

G. D. HAMILTON, *Chief Musician.* L. Y. DYENFORTH, *Principal Musician.*
C. B. BYRD, *Drum Major.*

SERGEANTS—F. LASSITER HOLLAND, H. G. REDSTONE, L. P. SPENCER, F. L. THOMPSON.

CORPORALS—H. E. FREEMAN, W. R. BRIGGS, E. R. DIAZ, D. B. SWEAT, G. M. KINDSETH, C. J. DIAZ, H. L. WILSON, E. W. FREEMAN.

PRIVATES—M. L. MCCLUNG, G. D. MANER, R. D. WATTS, G. W. MCRORY, D. A. STORMS.

VOLUNTEER—J. L. HEARIN.

GENERAL INFORMATION

GIFTS TO THE UNIVERSITY

The facilities of many of the State educational institutions of the South have in recent years been increased by substantial gifts. With deep gratitude the University acknowledges that it also has profited by this generosity. It feels confident that other broad-minded persons will desire to help in its upbuilding. All gifts, of whatever nature or value, will be gladly received and acknowledged.

George Peabody Hall.—The University and the Commonwealth of Florida here record their grateful appreciation of the gift of forty thousand dollars ($40,000) from the Peabody Board of Trust. This has been used in the erection of the George Peabody Hall, named in honor of the great benefactor of the South and devoted to the training of teachers. Because of this bequest the State now offers, at the University, the best of facilities for the training of superintendents, high school principals and teachers for every grade of the public school system.

Chair of Secondary Education.—This opportunity is taken of acknowledging the annual gift by the General Education Board, of New York, of seventeen hundred and fifty dollars ($1,750) toward the establishment and maintenance of a Professorship of Secondary Education.

Scholarships.—No method of contributing to the spread of higher education is wiser or more beneficent than to give a worthy and ambitious young man the opportunity of availing himself of the advantages offered by his State university. The establishment of several scholarships is gratefully acknowledged. A list of these and the names of the donors will be found on pages 33 and 34.

HISTORY

Beginning with its territorial days Florida has always manifested interest in higher education, and with this in mind has formulated many plans and established many institutions.

As early as 1824 the foundation of a university was discussed by the Legislative Council. In 1836 trustees for a proposed university were named, but these seem to have accomplished nothing. (*Memoirs of Florida*, 1,168.)

Upon its admission to the Union in 1845, the State was granted by the general government nearly a hundred thousand acres of land, the proceeds from which were to be used to establish two seminaries, one east and one west of the Suwannee River. This led to the foundation at Ocala in 1852 of the East Florida Seminary and of the West Florida Seminary at Tallahassee in 1856. The former of these institutions was, however, removed to Gainesville in 1866. The State Constitution of 1868 contained provisions for establishing and maintaining a university (*Art.* VIII, *Sec.* 2), pursuant to which the Legislature passed the next year "An Act to Establish a Uniform System of Common Schools and a University." The salient features of this Act show high ideals and purposes and would be a credit to any State. Other attempts to establish a university were made in 1883 by the State Board of Education and in 1885 by the Legislature. Furthermore the State Constitution, adopted later in the year 1885, expressly permitted special legislation with regard to a university.

Meanwhile, in 1870, the Legislature had, in accordance with the terms of the "Land-Grant College" Act of Congress of 1862, passed "An Act to Establish the Florida Agricultural College." An Act supplementary to this was passed in 1872, and the State received from the general government ninety thousand acres of land, the proceeds from which were to be used in support of the proposed college. A site for the college was selected in 1873 and again in 1875. No educational work having been accomplished in the "temporary college edifice" at its second location, the trustees appointed a committee in 1878 to decide upon a more suitable situation. Not until 1883 was the third site selected—this time, Lake City. Here building operations were pushed forward as rapidly as possible and, upon the completion of the main building in the autumn of 1884, the work of instruction was finally begun. An attempt was made in 1886 by this institution to have its name changed to the "University of Florida," a title it finally secured by the Legislative Act of 1903. Before this, in 1887, the Florida Agricultural Experiment Station had, in accordance with the terms of the Hatch Act, been established as one of its depart-

ments and three years later the provisions of the Morrill Act provided a substantial increase in its annual income.

During these years, in addition to the new State University and the Florida State College at Tallahassee, four other institutions of higher education, all depending upon the State for support, had come one by one into existence. These were the Normal School at DeFuniak Springs, the East Florida Seminary at Gainesville, the South Florida College at Bartow and the Agricultural Institute in Osceola County. In 1905, however, inasmuch as these had failed to make sufficient differentiation among themselves and to separate their work sufficiently from that of the high schools of the State, and inasmuch as the cost of maintaining all six seemed disproportionate to the results obtained, the Legislature passed the "Buckman Act," the practical effect of which was to merge the six schools into the "Florida Female College", at Tallahassee, and the "University of the State of Florida." Both these institutions began their scholastic work in September, 1905. In 1909 an Act of the Legislature changed the name of the one to the "Florida State College for Women," of the other to the "University of Florida."

During the first session of the University a distinct Normal School, which included two years of Sub-Freshman grade, was maintained. In addition to this, instruction was given in agriculture and in engineering, as well as in the usual collegiate branches. Candidates for admission to the Freshman class must have finished the eleventh grade of a high school. The Agricultural Experiment Station was a separate division, although members of its Staff gave instruction to the students and the President of the University acted as its Director. The next year the Staff of the Agricultural Experiment Station were required by the Rules and Regulations of the Department of Agriculture to devote their time exclusively to Station activities, and Mr. P. H. Rolfs was elected Director. The Normal School was abolished and instruction in pedagogy was transferred to the University proper. Two years of Sub-Freshman work were, however, still offered.

Upon the election in 1909 of Dr. A. A. Murphree to the presidency, steps were taken to reorganize the University. The present organization dates from 1910. The College of Law was added in 1909 and the departments offering instruction mainly to normal students were organized into a college

in 1912. In 1913 the present entrance requirements went into effect. The same year a Summer School was established at the University by Act of the Legislature and arrangements were made whereby the Farmers' Institute Work of the University and the Cooperative Demonstration Work for Florida of the United States Department of Agriculture were combined.

LOCATION

On the 6th day of July, 1905, acting under powers conferred by the Buckman Act, the State Board of Education and the Board of Control in joint session, selected Gainesville as the location for the University. During the scholastic year of 1905-06, that is, until suitable buildings could be erected at Gainesville, it was found necessary to carry on the work of the University at Lake City. Since the summer of 1906 the institution has occupied its present site.

The advantages that Gainesville presents as the seat of the University are numerous. It is centrally located and easy of access. It has well paved, lighted and shaded streets, an exceptionally pure water supply and a good sewerage system. The citizens are energetic, progressive and hospitable. The moral atmosphere is wholesome and for years the sale of intoxicants has been prohibited by law. The leading religious denominations have attractive places of worship.

GROUNDS AND BUILDINGS

The University occupies a tract of six hundred four acres, situated in the western extremity of Gainesville. Ninety acres of this tract are devoted to the campus, drill-ground and athletic fields; one hundred thirty-five acres are utilized for the farm of the College of Agriculture; the remainder is used by the Agricultural Experiment Station.

The University is one of the few institutions in the United States that made plans before laying the foundation of a single building for all future development of the campus, as far as this could be foreseen. Consequently the campus presents an harmonious appearance. The liberality of the State has permitted the erection of buildings as fast as they were needed. Twelve have already been constructed, all of which are lighted

with electricity, supplied with city water and furnished with modern improvements. These buildings are:

The two *Dormitories,* Thomas Hall and Buckman Hall, brick and concrete structures, three stories in height, sixty feet in width and three hundred and two hundred forty feet, respectively, in length. They are built in fireproof sections, each containing twelve suites of dormitory-rooms and on each floor of each section a shower-bath, lavatory and toilet.

The *Mechanic Arts Shop,* a one-story brick building, sixty feet long and thirty feet wide, with a wing thirty feet long and twenty feet wide. It provides for the shop work in the Engineering, Mechanic Arts and Manual Training Courses.

Science Hall, a brick and concrete building of two stories and a finished basement, one hundred thirty-five feet long and sixty-six feet wide. It contains the classrooms and laboratories of the Departments of Botany and Horticulture, Chemistry, Physics and Biology and Geology.

The *Experiment Station Building,* a brick and concrete structure, of three stories and a finished basement, one hundred twenty feet long and sixty feet wide. It contains the offices and laboratories of the Agricultural Experiment Station.

Engineering Hall, a brick and terra-cotta structure, three stories high, one hundred twenty-two feet long and seventy-three feet wide, with a one-story wing for boilers and steam engine laboratory. It provides offices, classrooms, laboratories and drafting-rooms for the Departments of Civil Engineering, Electrical Engineering, Mechanical Engineering and Mechanic Arts.

The *Gymnasium,* a temporary wooden structure, one story high, sixty feet long and forty feet wide. It is provided with equipment for physical training, lockers and showers. A swimming-pool, thirty-six feet long, twenty-four feet wide, and from four and a half to seven feet deep, has recently been added.

The *Agricultural College Building,* a brick and concrete structure three stories high, one hundred fifteen feet long and sixty-five feet wide. It provides for classrooms, laboratories and offices for the Departments of Agronomy, Animal Husbandry and for Extension Work. One-half of the second floor is used at present as a general assembly hall.

The *University Commons,* a brick building of one story and basement, one hundred fourteen feet long and forty-two feet

wide, with a wing forty-nine feet long and twenty-seven feet wide. It provides a large dining-hall and kitchen.

Language Hall, a brick and stone structure of three stories, one hundred thirty-five feet long and sixty-six feet wide. It is the home of the College of Arts and Sciences and provides classrooms and offices for the Departments of Languages, History and Mathematics, together with the administrative offices of the University and rooms for the use of the literary societies and the Young Men's Christian Association.

George Peabody Hall, a brick building three stories high, one hundred thirty-five feet long and seventy-two feet wide. It provides for the Departments of Education and Philosophy and for the Teacher Training Work of the University. The general library of the University is at present in this building.

The *College of Law Building,* a brick and stone structure of two stories, one hundred twenty feet long and seventy feet wide. It contains an auditorium, model court-room, lecture-rooms and offices, library, reading and consultation rooms, cataloguing room and quarters for the Marshall Debating Society.

VALUE.—The value of the property used for the work of the University is about $660,000.

ENDOWMENT

The annual income of the University, apart from Legislative appropriations, is derived principally from the following Federal grants: (a) The "East Florida Seminary Fund," amounting to about two thousand dollars ($2,000); (b) the "Agricultural College Fund" bonds, yielding about seventy-seven hundred dollars ($7,700); (c) one-half of the "Morrill Fund," amounting to twelve thousand five hundred dollars (12,500); (d) one-half of the "Nelson Fund," yielding twelve thousand five hundred dollars ($12,500). The total income thus derived amounts to thirty-four thousand seven hundred dollars ($34,700).

For the support of the Agricultural Experiment Station the Federal government makes two annual grants: (a) the "Hatch Fund" and (b) the "Adams Fund." Each of these amounts to fifteen thousand dollars ($15,000).

EQUIPMENT

LIBRARY.—The general Library contains about 15,000 volumes. Additional books are purchased as fast as funds are available. An effort is being made to place on the shelves all books extant relating to Florida history.

All the books in the Library are catalogued and shelved according to the Dewey system, making them readily available for reference. Students are encouraged to use the card catalogues, which are arranged alphabetically, both according to authors and to subjects, and by free access to the stacks to become familiar with the books themselves. The librarian or a student assistant is always in attendance to explain the arrangement of books and to give aid in reference work. A taste for literature and information is being developed in many students who, before entering the University, have not had access to a good library.

As a designated depository of Federal documents, the Library receives each year several hundred volumes of valuable government publications. Files are kept of all Florida State publications and of the bulletins and reports of the Agricultural Experiment Stations throughout the Union.

In the reading-room are one hundred three of the best general and technical periodicals. The back numbers of these are bound and kept on file and the early volumes purchased whenever they can be obtained and funds permit. Here also are received the leading newspapers of the State. County papers are added to the list at the request of students.

The technical departments possess special libraries, housed in their respective buildings, but accessible to all members of the University.

MUSEUM.—The University Museum occupies rooms in Science Hall, where it has recently been installed with new exhibition and storage cases. Its functions are to embody the material of a State museum; to collect and preserve a complete representation of the history of the State of Florida, both natural and civil: the natural history to be represented by complete collections of the minerals, the flora and the fauna; the civil by material illustrating the advancement of civilization in the State, together with the economic natural resources.

The collections at present embrace over two hundred fifty mounted birds, six hundred bird skins, about one hundred

bird nests and nearly eight hundred sets of bird eggs. Nearly two hundred snakes and lizards, about thirteen thousand shells, two thousand prehistoric Indian relics, several thousand fossils, about one hundred casts of rare fossils, about one hundred minerals, over two thousand insects and a number of historic relics.

The Museum is open to students and the public every weekday afternoon from one-thirty to five, when the curator is present and will be pleased to meet and assist visitors.

LABORATORIES.—The following laboratories are maintained by the University:

The *Botanical Laboratory* contains enough dissecting microscopes and instruments and Bausch and Lomb compound microscopes, magnifying from 80 to 465 diameters, for the individual use of the students; a Zeiss binocular microscope; a large compound microscope of very high power; two demonstration microscopes; and a McIntosh stereopticon, with projection microscope attachment. For work in histology there are hand microtomes, section knives, a sliding microtome, Millers' paraffin bath and a supply of reagents, stains and mounts; for studies in physiology there are germination boxes, nutrient jars, an osmometer, a clinostat and a number of other pieces. An herbarium has been started, to which students each year add specimens which they collect, identify and mount. A case of reference books and periodicals is in the laboratory within easy reach.

The *Chemical Laboratory* is equipped with all the apparatus and material necessary for instruction in general inorganic and organic, analytical and industrial chemistry, as well as for advanced work. It contains two delicate balances, a latest model polariscope, microscope and spectroscope, ample platinum ware (crucible dishes, electrodes, wire and foil) and many special pieces of apparatus for illustrating, upon the lecture table, chemical principles. The equipment is modern in every respect and can be used to the best advantage. The stock of chemicals is abundant and complete.

The *Dynamo Laboratory,* providing for practical instruction on electrical machinery, occupies a portion of Engineering Hall. The principal machines are a 10-KW Type ACS General Electric synchronous converter, a 2.5-KW General Electric Type IB direct current generator, a 1-HP Westinghouse Type R motor, a 1-KW synchronous motor and two 2-KW Westing-

house Type S dynamos, designed to be used either as generators or as motors. The switchboard panel for each machine is placed near it, but is connected to terminals on a main distribution board for the whole laboratory. Power is supplied by a 10-HP single-phase Wagner induction motor, connected to the city alternating current supply and driving the main shaft of the laboratory. The various machines are driven from this shaft, and can be thrown in or out by friction clutches.

The laboratory is also supplied with transformers, several types of arc lamps and numerous measuring instruments of different ranges, chiefly of Weston make.

The *Geological Laboratory* contains the United States Geological Survey Educational Series of rocks. Students of historical geology are provided with a collection of fossils illustrating the distribution and development of organisms. For the study of mineralogy there is a blowpipe collection of one hundred selected mineral species, an accessory blowpipe collection of miscellaneous minerals, a crystal collection of fifty natural crystals and a reference collection of choice mineral specimens.

The *Physical Laboratory* is well equipped with apparatus and meets the needs of such undergraduate work in physics as is usually carried on in the best American colleges. The western half of the ground floor of Science Hall is devoted to the Department of Physics. Its quarters include a lecture-room, 25 feet by 23 feet, with amphitheatered seats, an office and library room; a main laboratory room, 28 by 25 feet; an electrical laboratory, 30 by 14 feet; a battery room; an optical room, 23 by 10 feet, arranged so as to be effectively darkened; a work-shop; a store-room; and a private laboratory room, for research work. Water, gas and electricity from various circuits, are led to all of the rooms. The laboratory is provided with several brick piers, on foundations independent of the rest of the building, for the accommodation of instruments requiring special stability.

The *Zoological and Bacteriological Laboratories* are well equipped for the work of instruction. In addition to the necessary glassware and reagents, there are a number of high-grade microscopes; dissecting microscopes; two microtomes, one for celloidin, the other for paraffin sectioning; paraffin bath; sterilizers, both wet and dry; warm and cool incubators; dark-ground illuminator; balances; centrifuge; breeding cages; an-

atomical preparations and models; a number of the Leukart-Chun zoological wall charts; one Leitz large compound microscope with mechanical stage and a full set of apochromatic objectives; and one Bausch and Lomb projecting lantern with accessories. The departmental library contains a number of the current periodicals as well as the more important text-books and reference works.

The *Psychological Laboratory* occupies six rooms on the first floor of Peabody Hall and is well equipped for class demonstrations, and for carrying on experimental and research work in psychology. As demand arises new equipment will be added. In addition to the apparatus for the regular experimental work, the laboratory is well equipped for carrying on the mental and physical tests in connection with the work in educational psychology offered by the Teachers College.

The *Mechanical Engineering Laboratory* has a 50,000 pound testing machine for testing the strength of materials, a large and small vertical steam engine, a pressure blower, a fan blower, a boiler feed pump, an indicator and a steam gauge tester. It is expected to have these erected in the new laboratories at an early date. The large water tube boilers installed for the heating plant are also available for testing purposes.

The *Computing-Room* is furnished with all necessary tables and a library of about two hundred reference books for use in connection with the work of the mechanical laboratories and drafting-room.

The *Drafting-Room* is equipped with substantial oak desks and possesses the necessary minor equipment to accommodate classes of twenty-four students. It has been carefully designed for the purpose and is a model of its kind.

AGRICULTURAL EQUIPMENT.—A full description of the agricultural equipment is to be found under the General Statement of the College of Agriculture.

SURVEYING INSTRUMENTS.—These consist of three surveyor's compasses; three wye levels, two dumpy levels and one precision level; two plain and four stadia transits, of which three are equipped with attachments for solar and star observations; one complete plane-table; and the necessary rods, chains, tapes and minor apparatus.

SHOPS.—The *Wood Shop* is provided with lockers, equipped with a full set of tools for bench work, such as chisels, squares, saws, gauges, etc. The wood-working machinery consists of

nine wood-turning lathes, a planer, a rip-saw, band-saw and trimmer.

The *Machine Shop* is equipped with an 18-inch Cady lathe, an 11-inch Seneca Falls lathe, a drill press, a Gray planer, a No. 1 Brown & Sharpe Universal milling machine, a Springfield shaper, a small Barnes lathe, three emery wheels, grindstone, vises and tools.

The *Forge Shop* is equipped with six power-blast forges, one hand forge, six anvils and a large supply of tools.

ATHLETIC EQUIPMENT.—The institution has provided a hard-surfaced athletic field, including football gridiron, baseball diamond, with grandstand and enclosed field, and ample tennis court facilities. A basket-ball court and concrete swimming-pool are also located on the campus. The equipment of the gymnasium represents an expenditure of about $3,000.00.

GOVERNMENT AND REGULATIONS

ADMINISTRATION

BOARD OF CONTROL.—The general government of the University is vested by law in a Board of Control consisting of five members from various parts of the State, appointed, each for a term of four years, by the Governor of Florida.

The Board of Control appoints the President and, upon his nomination, elects members of the Faculties, directs the general policies of the University and supervises the expenditure of its funds. The Board also prescribes the requirements for admission, with the advice of the President and Faculties, and upon their recommendation confers degrees.

PRESIDENT.—The direct administration of all affairs of the University is in the hands of the President.

DEANS AND DIRECTORS.—As executive head each college of the University (for Organization see page 45) has a Dean, appointed from the Faculty of that college, the Division of University Extension and the Agricultural Experiment Station have a Director. These officers are responsible to the President.

UNIVERSITY COUNCIL.—The President and Vice-President of the University, the Deans of the several colleges and the Director of the Agricultural Experiment Station form a council of administration, with the following functions: To lay out new lines of work, inaugurate new enterprises in general

and prepare the annual budget; and to act as the judicial body of the General Faculty on cases of general discipline not under the authority of the colleges, on new courses of study and changes in existing courses, bringing these matters before the Board of Control, and on questions of college action referred to it by any member of the General Faculty.

FACULTY.—The General Faculty of the University includes all persons engaged in the work of instruction in the University, excepting laboratory assistants and undergraduate assistants to the professors. Under the leadership of the President, it forms the general governing body in all matters of instruction and discipline.

The Faculty of a college consists of those members of the General Faculty who give instruction in it. Under the leadership of its Dean, it forms the governing body in matters of instruction and discipline in its college.

DISCIPLINE

OFFICERS.—An *Officer in Charge,* occupying quarters in one of the dormitories, has immediate supervision of the general life of the student body.

In each section of the dormitories a *Monitor* maintains a general oversight and makes reports to the Officer in Charge. Monitors are appointed from among those students who are more than twenty-one years of age.

OFFENSES AGAINST GOOD CONDUCT.—Any offense against good conduct, in the ordinary meaning of the word, renders a student liable to discipline, whether or not a formal rule against the offense has been published.

The following offenses will be treated with special severity: Disrespect to an officer of the University; wanton destruction of property; gambling; drunkenness, or having intoxicating liquors in possession on the University grounds.

The use of intoxicating liquors at student functions of any kind or by student groups or individual students, either on or off the campus, is strictly forbidden.

HAZING.—No form of hazing will be tolerated in the University and no student will be assigned to a room in a dormitory until he has matriculated and signed the following pledge:

"I hereby promise upon my word of honor, without any mental reservation whatsoever, to refrain from all forms of hazing while I am connected with the University of Florida."

ABSENCE FROM THE UNIVERSITY.—No undergraduate student is permitted to be absent from the University over night without written permission from the Officer in Charge.

ABSENCE FROM CLASSES.—A student who accumulates ten unexcused absences from classes, or three unexcused absences from drill, will be given a severe reprimand and parent or guardian will be notified. Two additional unexcused absences will cause the student to be dismissed from the University. Ten unexcused absences from Chapel will subject all students, except Seniors and those in the College of Law, to the same penalty.

ATTENDANCE UPON DUTIES.—A student who, without good cause, persistently absents himself from his University duties, is, after due warning, dishonorably dismissed for the remainder of the academic year. A student who, by reason of ill health or outside demands upon his time, finds it impossible to give regular attention to University duties, is requested to withdraw; but such request does not in any way reflect upon his good standing.

All delinquencies in University duties are reported to the Officer in Charge, who brings them to the attention of the students and requires a prompt explanation to be made. Careful records of all delinquencies are kept.

STUDIES

QUANTITY OF WORK.—A minimum and maximum number of recitation hours (or equivalent time in laboratory courses) per week is prescribed in each college and no student may take less than the minimum or more than the maximum, except by special permission of the Faculty of his college. Not counting Military Science, these numbers are: in the College of Arts and Sciences, 15 and 18, respectively; in the College of Agriculture, 16 and 23; in the College of Engineering, 15 and 23; in the College of Law, 15 and 18; and in the Teachers College, 15 and 19.

In counting hours, two hours of laboratory work are considered equivalent to one hour of recitation.

CONFLICTS.—Studies must be so chosen as not to conflict, as shown on the printed schedule for the year.

ASSIGNMENT TO CLASSES.—Every student must appear before the Dean of his college at the beginning of each academic year for assignment to classes. An individual instructor has

no authority to enroll a student in any course, except as authorized by the Dean of his college.

CHOICE OF STUDIES.—The choice as to which one of the various curricula is to be pursued rests with the individual student, subject to considerations of proper preparation; but the group of studies selected must be that belonging to one of the regular years in the chosen curriculum exactly as announced in the catalogue, unless special reasons exist for deviating from this arrangement. A student will, however, be held to the requirements of the catalogue under which he entered.

CONDITIONS.—A student who is prepared to take up most of the studies of a certain year in the regular curriculum, but is deficient in some studies, will be permitted to proceed with the work of that year subject to the *condition* that he make up the studies in which the deficiency occurs. This should be done, when possible, by study with a private tutor and examination as soon as the work is completed. It may be done, however, by pursuing the studies in question with a lower class in the University, and the Dean of the college in which the student is enrolled has authority to require it to be done in that way when such procedure seems best. In every case, provision for all of the lower studies must be made before any of the higher may be taken; and in the event of conflicts in the schedule, or excessive quantity of work, higher studies must give way to lower.

EXTRA STUDIES.—By special permission from the Dean of his college, a student may take extra studies in addition to those prescribed, provided this can be done without conflicting with a regular study or exceeding the maximum number of hours of study. Such permission is not, as a rule, granted to any conditioned student; and it may be withdrawn from any student in the event of his failure in any of the regular studies.

SPECIAL STUDENTS.—Students who desire to take special courses will be allowed to take those classes for which they may be prepared. Such students are subject to all the laws and regulations of the University. These special courses do not lead to any degree.

The purpose of permitting students to take special courses is merely to provide for the occasional exceptional requirements of individual students. Any abuse of this privilege, for

the sake of avoiding regular studies which may be distasteful, cannot be tolerated. Accordingly, no minor student is permitted to enter as a special student except upon written request of his parent or guardian. Minor special students must, except as provided for in the College of Agriculture, offer fourteen units for admission.

CLASSIFICATION OF IRREGULAR STUDENTS.—A student is deemed to belong to that class in which the majority of his hours of work lies. But a special student is not considered as belonging to any of the regular classes.

CHANGES IN STUDIES.—After a student is once registered, he is not permitted to discontinue any class or to begin any additional one, without written permission from the Dean of his college, which must be shown to the instructor involved. If the student has been registered for two weeks, he will not be permitted to make any change in his course, except at the beginning of the second semester, without the payment of a fee of two dollars ($2.00).

GRADES AND REPORTS.—Each instructor keeps a record of the quality of work done by each student in his classes and assigns grades, on the scale of 100. At the end of each month the average grades for the month of each student are reported to the office of the University for permanent record and for entry upon a monthly report to parent or guardian.

If the monthly grades show that a student is not doing satisfactory work, he may be required to drop some of his studies and substitute studies in a lower class, or he may be required to withdraw from the University.

EXAMINATIONS.—At the end of each semester examinations are held on all of the work of that semester.

FAILURE IN STUDIES.—A final grade for each semester's work is assigned, based upon the examination and the monthly grades. If this grade falls below 75, the student is considered to have failed and may proceed only subject to a condition in the study in which failure has occurred.

RE-EXAMINATIONS.—A student who has failed in the work of a semester is allowed, in case his grade does not fall below 60, to make up the condition by re-examination, on the first Saturday of March or the first Saturday of October. Only one re-examination in any subject is allowed; in case of failure to pass this, the student must repeat the semester's work in the subject concerned.

DEGREES.—The special requirements for the various degrees offered by the University will be found under the General Statement of each of the five colleges and of the Graduate School. The following regulations, however, apply to all colleges:

A student must while pursuing studies leading to a degree be registered in the college offering that degree.

Two degrees of the same rank, as e. g. B. S. C. E. and B. S. E. E., will not be conferred upon the same individual, unless the second degree to be conferred represents at least fifteen hours of additional work.

ATHLETICS

ABSENCES ON ACCOUNT OF ATHLETICS.—The members of regular athletic teams, together with necessary substitutes and a manager, are permitted to be absent from University duties for such time, not to exceed nine days per semester, as may be clearly necessary to take part in games away from Gainesville. All class-work missed on account of an athletic trip must be made up, as promptly as possible, at such hours as may be arranged by the various professors.

SCHEDULE OF GAMES.—The schedule of games must be arranged so as to interfere as little as possible with University duties and must receive the approval of the Committee on Athletics. All regular games will be scheduled with members of the Southern Intercollegiate Athletic Association or with colleges that have signed an agreement to play under Association rules.

ELIGIBILITY TO ATHLETIC TEAMS.—Any team playing under the name of the University of Florida must be composed exclusively of genuine students in good standing in the University. A list of players and substitutes must be submitted to the Committee on Athletics before each game and must receive its approval. Negligence of duties, or failure in studies, excludes a student from the right to play on a team representing the University.

No student is permitted to play on any of the regular teams, who, in the opinion of the University physician, is not in proper physical condition. No minor student is permitted to play, if his parent or guardian objects to his doing so.

HONORS

PHI KAPPA PHI.—A chapter of the Phi Kappa Phi Honor Fraternity was established at the University during the spring of 1912. This society has for its main aim the encouragement of learning and of high ideals. To be eligible for membership a student must have been in attendance at the University for at least three semesters, have been guilty of no serious breaches of discipline and have finished five-eights of a course leading to a degree. The number that can be elected is limited to the first third of the Senior class of the University and to the first sixth of the Junior class of each of the various colleges. The numerical grade which must be attained is based on all college work, whether done here or elsewhere, for which the student receives credit towards a degree. As a grade five per cent higher is required of Juniors than is demanded of Seniors, it is a greater honor to gain election in the Junior year.

MEDALS.—Medals are offered (1) to the best declaimer in the Freshman and Sophomore classes; (2) for the best original oration by a member of the Junior class of any college; (3) for the best original oration by a member of the Senior class of any college. These contests are settled in public competition at Commencement. The speakers are limited to four from each class and are selected by the Faculty.

STATEMENT OF EXPENSES

UNIVERSITY CHARGES.—*Tuition.*—A tuition fee of forty dollars ($40.00) per year is charged every student registered in the College of Law*. In the other colleges a student whose legal residence is in Florida is subject to no charge for tuition; a student who is not a legal resident of the State is required to pay a tuition fee of twenty dollars ($20.00) per year.

Registration Fee.—A registration fee of five dollars ($5.00) per year is charged all students, except one scholarship student from each county in Florida. In order to secure this exemption, the scholarship must be filed with the auditor on the day of registration. These scholarships are to be obtained from County Superintendents of Public Instruction.

An additional fee of two dollars ($2.00) is required of students who enter after the day scheduled for registration.

Damage Deposit.—In order to secure the University

*This charge is made, regardless of whether the student takes the full or only a partial course.

against damage, the sum of five dollars ($5.00) must be deposited at registration. Damage known to have been done by any student will be charged to his individual account; other damages will be prorated among the students.

At the end of the scholastic year this deposit, less the amount deducted, will be returned to the student. Orders for the disbursement of sums remaining to the credit of individual students must be presented in person, and will be recognized by the auditor only after the close of the second semester.

Infirmary Fee.—An infirmary fee of three dollars ($3.00) is charged each student whose parent or guardian does not reside in Gainesville, the proceeds of which go towards defraying the salary of a resident nurse. This secures for the student, in case of illness, the privilege of a bed in the infirmary (which occupies Section A of Thomas Hall), the services of the nurse and attention from the University physician, E. R. Flint, M. D. (Harvard).

**Contingent Fee.*—A contingent fee of $5.00 for physical instruction will be charged each student. The payment of this fee will also entitle the student to a ticket admitting him to all athletic games played on the campus by University teams.

Board and Lodging.—Board, lodging and janitor service will be furnished by the University at a cost of sixty-two dollars ($62.00) for the first semester, not including the Christmas vacation, and sixty-six and a half dollars ($66.50) for the second semester. These sums must be paid at the beginning of each semester. Under no circumstances, except on account of sickness, will any part of these charges be refunded because of absence for a period of less than one month; in case a student is dismissed from the University, no part will be refunded. In very exceptional cases, arrangements may be made to pay as follows: Twenty dollars on September 22, October 30 and on December 7; $26.50 on January 29; and $20.00 on March 14 and on April 14. Under *Board and Lodging* are included meals in the dining-hall and room (with heat, light, janitor service and access to a bathroom), furnished as stated below. The doors of the rooms are provided with Yale locks. A deposit of 50 cents is required for each key, which will be returned when the key is surrendered. *Janitor service* includes

*Approved by the Board of Control at their February, 1915, meeting on petition of the student body.

the care of rooms by maids under the supervision of a competent housekeeper.

Lodging without Board.—Students occupying a room in the dormitories, but not taking meals in the dining-hall, will be charged $5.00 per month for lodging.

Board without Lodging.—Board without lodging will be furnished at the rate of $13.50 per calendar month, payable in advance. No part of this sum will be refunded.

Furniture.—All rooms are partially furnished. The furniture consists of two iron bedsteads and mattresses, chiffonier or bureau, table, washstand and chairs. The students are required to provide all other articles, including pillows, bedding, wash-bowl, pitcher, mirror, half curtains, mosquito-bar, etc.

Uniform.—Students in the military department are required to provide themselves with the prescribed uniform, which is furnished under contract. The suit is of Charlottesville cadet gray, of good quality and inexpensive. A cap of dark blue cloth and two pairs of white duck trousers are also required. This uniform is neat and serviceable and may be worn at all times. The total cost is about $17.00.

Books.—The cost of books depends largely upon the course taken, but is, in no case, a large item of expense, though in the higher classes the student is encouraged to acquire a few works of permanent value.

Summary.—The following statement summarizes the minimum expenses of a Florida student registered in any college save in that of Law:

Tuition	$000.00
Registration Fee	5.00
Damage Deposit	5.00
Infirmary Fee	3.00
Contingent Fee	5.00
Board and Lodging	128.50
Uniform (about)	17.00
Books (about)	10.00
Incidentals (laundry, athletic, literary society, etc., dues), about	20.00
	$193.50
Less Damage Deposit returned at end of year	5.00
	$188.50

Students who are exempt from buying uniforms will deduct $17.00 from the above table; students from other States will add a tuition fee of $20.00.

The actual University charges to a law student (including

board and lodging, fees and tuition, but not including books or damage deposit) are $181.50.

REMITTANCES.—*All remittances should be made to the Auditor, University of Florida, Gainesville, Fla.*

FELLOWSHIPS.—Three Teaching Fellowships, established in order to encourage young teachers to prepare themselves further for their work by taking graduate courses in Education, are offered in the Teachers College. Each fellowship pays $200.00 annually.

Application for a fellowship must be made in writing and addressed to the Dean of the Teachers College or to the President of the University. It must show that the applicant is a college graduate and that he has ability to profit by the work offered. Testimonials of good character must accompany the application.

The holder of a fellowship must devote himself to the prosecution of studies leading to the Master's degree in Education. He will be expected to teach four or five hours per week in the Practice High School, under the direction and supervision of the Teachers College. (This teaching will count as two hours toward the degree.) He may be called upon for other minor services, such as conducting examinations and teaching review classes, but he shall not be called upon to do anything that would interfere with his regular graduate work.

SCHOLARSHIPS.—Through the generosity of friends, the University is able to offer the following scholarships:

Two of $100.00 each per year:

1. *Board of Control Scholarship.*—Established and maintained by the Board of Control. For a Florida student.

2. *Kirby Smith Scholarship.*—Established and maintained by the Kirby Smith Chapter of the Daughters of the Confederacy. For the grandson of a Confederate veteran.

Seven of $128.50 each per year:

3. *Children of the Confederacy Scholarship.*—Established and maintained by the Florida Branch of the Children of the Confederacy. For the lineal descendant of a Confederate soldier.

4 and 5. *United Daughters of the Confederacy Scholarships.*—Established and maintained by the United Daughters of the Confederacy of the State at large. For lineal descendants of Confederate veterans.

6. *J. J. Finley Scholarship.*—Established and maintained by the J. J. Finley Chapter of the Daughters of the Confederacy. For the grandson of a Confederate veteran.

7. *Lykes Scholarship.*—Established and maintained by Mr. F. E. Lykes, of Havana, Cuba.

8. *Twentieth Century Club Scholarship.*—Established and maintained by the Twentieth Century Club, of Gainesville, Florida.

9. *Alumni Scholarship.*—Established and maintained by the Alumni Association of the University.

Two of $200.00 each per year:

10. *Southern Railway Scholarship—William Wilson Finley Foundation.*—Maintained by the Southern Railway Company as a memorial to the late President Finley and in recognition of his interest in agricultural education. Tenable for four years. For a resident of any county through which the G. S. and F. R. R. runs. The recipient must enter the College of Agriculture.

Further particulars relating to this scholarship may be obtained from Mr. M. V. Richards, Industrial Agent, Southern Railway, Washington, D. C., or from Dean J. J. Vernon, College of Agriculture, University of Florida, Gainesville, Florida.

11. *Knight and Wall Scholarship.*—Established and maintained by the Knight and Wall Company, hardware dealers, of Tampa. Tenable for four years.

Further particulars relating to this scholarship may be obtained from the Superintendent of Public Instruction, Hillsboro County, Tampa, Fla.

Application for a scholarship should be made to the President of the University and should be accompanied by a record of the student's work, statement of his need and testimonials as to his character. To secure a scholarship:

(*a*) The student must actually need this financial help to enable him to attend the University.

(*b*) He must be worthy to receive such help. To be worthy he must be of good character and habits and sufficiently far advanced to enter not lower than the Freshman class of the University.

Opportunities for Earning Expenses.—It is often possible for a student to earn a part of his expenses by working during such hours as are not required for his University duties.

The University gives a few students regular employment as waiters in the dining-hall, as janitors and in some other capacities. Such employment is not, as a rule, given to a student unless he is otherwise financially unable to attend the University. Employment is not given to a student who fails in any study.

While the employment of students is designed to assist those in need of funds, the payment for their services is in no sense a charity. The rate of remuneration is no higher and the standard of service demanded is no lower than would be the case if the work were done by others than students. If a student employee fails to give satisfaction, he is promptly discharged. Otherwise he is continued in his position as long as he cares to hold it, provided it is not found to interfere with reasonable success in his studies and provided he does not commit any breach of good conduct.

Great credit is due those who are willing to make the necessary sacrifices, nevertheless students are advised not to undertake to earn money while pursuing their studies, unless such a course of action is unavoidable. Proper attention to studies makes sufficient demand upon the time and energy of a student, without the burden of outside duties; and such time as the studies leave free can be spent more profitably in healthful recreation.

ALUMNI ASSOCIATION

At the close of the Commencement exercises in 1906 the graduates of the year organized an Alumni Association. All graduates of the University *and the graduates of the former institutions who have had their diplomas confirmed by the University* are eligible for membership. An "Alumni Bulletin" containing a list of the Alumni, their present addresses and other information concerning them, is now being prepared and will shortly be published.

Further information concerning the Association may be had by addressing any one of the officers: President, B. R. Colson, Gainesville, Fla.; Vice-President, N. S. Storter, Punta Gorda, Fla.; Secretary and Treasurer, J. W. Blanding, Gainesville, Fla.

STUDENT ORGANIZATIONS AND PUBLICATIONS

Y. M. C. A.—There is a branch of the Y. M. C. A. in the University, which meets every Sunday. At these meetings the practical, rather than the theoretical, phases of Christianity are freely and candidly talked over and the students discuss among themselves the special problems which arise in student life. Members of the Faculty, the ministers of the city and distinguished Christian workers are frequently invited to address the Association. Bible classes are organized in connection with the work.

Students, on entering the University, should by all means become identified with this organization and parents should counsel and encourage them to do so. A note of introduction to the president of the organization will cause special attention to be given a new student.

LITERARY AND SCIENTIFIC SOCIETIES.—See General Statement of each of the five colleges of the University.

MUSICAL ORGANIZATIONS.—See Department of Music.

PUBLICATIONS.—Beginning with the session of 1909-10 each Senior class has published an annual, known as the *"Seminole,"* in which appears an account of the college year as seen by the Seniors. The annual is profusely and handsomely illustrated.

The *"Florida Alligator"* is a weekly newspaper owned and controlled by the student body. In it are recorded the local happenings of interest to the students. Its editorial articles discuss University problems from the viewpoint of the undergraduates. It seeks the support of all the alumni, who will find in it the best means of keeping in close touch with the University.

ADMISSION

TERMS.—A candidate for admission must present, along with his scholastic record, a certificate of good moral character, and, if he be from another college or university, the certificate must show that he was honorably discharged.

No candidate under 16 (19 in the College of Law) years of age will be admitted.

METHODS.—There are two methods of gaining admission to the University:

(1) *By Certificate.*—The University will accept certificates from the approved Senior high schools of Florida; from

accredited academies and preparatory schools of the State; and from any secondary school of another State which is accredited by its State university.

The certificate presented by the candidate for admission must be officially signed by the principal of the school attended. It must state in detail the work of preparation and, in the case of Florida high schools, that the course *through the twelfth grade* has been satisfactorily completed.

Blank certificates, conveniently arranged for the desired data, will be sent to all high school principals and, upon application, to prospective students.

(2) *By Examination.*—Candidates not admitted by certificate will be required to stand written examinations upon the entrance subjects. For dates of these examinations, see University Calendar, page 6.

REQUIREMENTS.—*"Entrance Units."*—The requirements for admission are measured in "Entrance Units," based upon the curriculum of the high schools of Florida. A unit represents a course of study pursued throughout the school year with five recitation periods of at least forty-five minutes each per week, four courses being taken during each of the four years. Thus the curriculum of the standard Senior high school of Florida is equivalent to sixteen units. Two laboratory periods should be counted as one recitation period.

Number of Units.—Admission to the Freshman class of the University will be granted to candidates who present properly certified credentials, showing that they have been graduated from a standard Senior high school with a full four-year curriculum based upon an eight-year grammar school course, or who present satisfactory evidence of having completed courses amounting to sixteen units of preparatory work.

In no case will credit for more than sixteen units be given for work done at a high school.

These requirements are at the very least equal to fourteen and one-half units as defined by the Carnegie Foundation or the National Educational Association.

Distribution of Units.—Of the *sixteen* units required for admission, *ten* (*eight* in the College of Law) are specified and *six* (*eight* in the College of Law) are elective. Eight of the specified units are required in common by all the colleges of the University, while the remaining two vary.

UNIVERSITY REQUIREMENT

English	3 units
Mathematics	3 units
History	1 unit
Science	1 unit

COLLEGE OF ARTS AND SCIENCES
TEACHERS COLLEGE

A. B. Curriculum

Latin	2 units

B. S. Curriculum

One Foreign Language or History and Science	2 units

COLLEGE OF AGRICULTURE

Agriculture	1 unit
History or Science	1 unit

COLLEGE OF ENGINEERING

Mathematics	1 unit
History or Science	1 unit

Elective Units.—The elective units are to be chosen from the list of elective subjects given below and from such other subjects as are regularly taught in a standard high school. Not more than four of these units will be accepted in vocational subjects, such as typewriting, stenography, mechanic arts, agriculture, etc.

LIST OF ELECTIVE SUBJECTS

Agriculture	1 unit
Botany	½ or 1 unit
Chemistry	1 unit
*Engineering Practice	4 units
English	1 unit
Latin	4 units
History	2 units
Mathematics	1 unit
Modern Languages—French, German, or Spanish	2 units
Physical Geography	1 unit
Physics	1 unit
Zoology	½ or 1 unit

Deficiencies.—A deficiency of two units will be allowed a candidate, but such deficiency must be removed by the end of the first year of admission.

*Only for admission to the College of Engineering.

DESCRIPTION OF UNIT COURSES

ENGLISH.—Four units.—The required work in English (including Grammar, Composition and Rhetoric and the recommended Classics) is designed to cover three years. It is urged that the exercises in Composition and the use of the Classics be continued throughout this time. No candidate will be accepted in English whose work is notably defective in spelling, punctuation, idiom or division into paragraphs.

(1) *Grammar.*—A thorough knowledge of English Grammar, both in its technical aspects and in its bearings upon speech and writing.

(2) *Composition and Rhetoric.*—A mastery of the fundamental principles of elementary Rhetoric, such as is given in any standard high school text; and constant practice in Composition, oral and written, during the whole period of preparation.

(3) *Classics.*—The English Classics now generally adopted by schools and colleges. There are two divisions of this work:

I. *Study and Practice.*—This part of the examination presupposes the thorough study of each of the works selected. The examination will be upon the subject matter, form and structure. In addition the candidate may be required to answer questions involving the essentials of English grammar and the leading facts in the periods of English history to which the prescribed texts belong.

II. *Reading.*—A certain number of books will be assigned for reading (see list subjoined). The form of examination will usually be the writing of a paragraph or two on each of several topics to be chosen by the candidate from a considerable number—perhaps ten or fifteen—set before him in the examination paper. The treatment of these topics is designed to test the candidate's power of clear and accurate expression and will call for only a general knowledge of the substance of the books. The candidate must also be prepared to answer simple questions on the lives of the authors.

STUDY.—One book to be selected from each of the four groups.

I. Shakespeare—Julius Caesar. Macbeth. Hamlet.

II. Milton: L'Allegro, Il Penseroso, and either Comus, or Lycidas. Tennyson: The Coming of Arthur, The Passing of Arthur, and The Holy

Grail. Selections from Wordsworth, Keats, and Shelley in Book IV of Palgrave's Golden Treasury (First Series).

III. Burke: Speech on Conciliation with the Colonies. Macaulay: Speech on Copyright; and Lincoln: Cooper Union Address. Washington: Farewell Address; and Webster: Bunker Hill Oration.

IV. Carlyle: Essay on Burns; and Selections from Burns's Poems. Macaulay: Life of Johnson. Emerson: Essay on Manners.

READING.—At least two books are to be selected from each of the five groups, except as otherwise provided under Group I.

I. The Old Testament (comprising at least the chief narrative episodes in Genesis, Exodus, Joshua, Judges, Samuel, Kings, and Daniel, together with the books of Ruth and Esther). The Odyssey (with the omission, if desired, of Books I, II, III, IV, V, XV, XVI, XVII). The Iliad (with the omission, if desired, of Books XI, XIII, XIV, XV, XVII, XXI). The Aeneid.

For any selection from Group I a selection from any other group may be substituted. The Odyssey, Iliad and Aeneid should be read in English translations of recognized literary merit.

II. A Midsummer Night's Dream. The Merchant of Venice. As You Like It. Twelfth Night. The Tempest. Romeo and Juliet. King John. Richard the Second. Richard the Third. Henry the Fifth. Coriolanus. *Julius Caesar. *Macbeth. *Hamlet. (*If not chosen for study).

III. Malory: Morte d'Arthur (about 100 pages). Bunyan: Pilgrim's Progress, Part I. Swift: Gulliver's Voyages to Lilliput and to Brobdingnag. Defoe: Robinson Crusoe, Part I. Goldsmith: Vicar of Wakefield. Scott: Any one novel. Jane Austen: Any one novel. Maria Edgeworth: Castle Rackrent, or The Absentee. Frances Burney (Madame d'Arblay): Evelina. Dickens: Any one novel. Thackeray: Any one novel. George Eliot: Any one novel. Mrs. Gaskell: Cranford. Kingsley: Westward Ho! or Hereward the Wake. Reade: The Cloister and the Hearth. Blackmore: Lorna Doone. Hughes: Tom Brown's School Days. Stevenson: Any of the novels which are out of copyright. Cooper: Any one novel. Poe: Selected Tales. Hawthorne: Any one of the novels which are out of copyright.

IV. Addison and Steele: The Sir Roger de Coverly Papers; or Selections from The Tatler and The Spectator. Boswell: Selections from the Life of Johnson (about 200 pages). Franklin: Autobiography. Irving: Selections from the Sketch Book (about 200 pages); or the Life of Goldsmith. Southey: Life of Nelson. Lamb: Selections from the Essays of Elia (about 100 pages). Lockhart: Selections from the Life of Scott (about 200 pages). Thackeray: Lectures on Swift, Addision and Steele in The English Humorists. Macaulay: One of the following essays: Lord Clive, Warren Hastings, Milton, Addison, Goldsmith, Frederic the Great, Madame d'Arblay. Trevelyan: Selections from Life of Macaulay (about 200 pages). Ruskin: Sesame and Lilies; or Selections (about 150 pages). Dana: Two Years before the Mast. Lincoln: Selections. Parkman: The Oregon Trail. Thoreau: Walden. Lowell: Selected Essays (about 150 pages). Holmes: The Autocrat of the Breakfast Table. Stevenson: Inland Voyage, and Travels with a Donkey. Huxley: Autobiography and Selections from Lay Sermons (including the addresses on Improving Natural Knowledge, A Liberal Education, and a Piece of Chalk).

V. Palgrave: Golden Treasury (First Series), Books II and III, with special attention to Dryden, Gray, Cowper, Burns, and Collins; Book IV, with special attention to Wordsworth, Keats and Shelley (if not chosen for study). Goldsmith: The Traveller, and The Deserted Village. Pope: The Rape of the Lock. A Collection of English and Scottish Ballads (as, for example, Robin Hood Ballads, The Battle of Otterburne, King Estmere, Young Beichan, Bewich and Grahame, Sir Patrick Spens,

and a selection from later ballads). Coleridge: The Ancient Mariner, Christabel, and Kubla Khan. Byron: Childe Harold, Canto III or IV; and The Prisoner of Chillon. Scott: The Lady of the Lake or Marmion. Macaulay: The Lays of Ancient Rome; The Battle of Naseby; The Armada; Ivry. Tennyson: The Princess; or Gareth and Lynette, Lancelot and Elaine, The Passing of Arthur. Browning: Cavalier Tunes, The Lost Leader, How They Brought the Good News from Ghent to Aix, Home Thoughts from Abroad, Home Thoughts from the Sea, Incident of the French Camp, Hervé Riel, Pheidippides, My Last Duchess, Up at a Villa—Down in the City, The Italian in England, The Patriot, "De Gustibus", The Pied Piper, Instans Tyrannus. Arnold: Sohrab and Rustum and The Forsaken Merman. Selections from American Poetry, with special attention to Poe, Lowell, Longfellow, and Whittier.

(4) *History of American Literature; History of English Literature.*—One unit, elective.—The fourth year of the high school course in English usually covers the above subjects.

MATHEMATICS.—Four units.—

(1) *Algebra*—First Year. — One unit. — A thorough knowledge of the elementary operations, factoring, highest common factor, least common multiple, fractions, simple equations, inequalities, involution, evolution and numerical quadratics. This is supposed to represent the work of one year in the high school.

(2) *Algebra—Second Year.*—One unit*.—A thorough study of quadratic equations, ratio and proportion, the progressions, imaginary quantities, the binomial theorem, logarithms and graphic algebra. This is supposed to represent the work of the second year in algebra in the high school.

(3) *Plane Geometry.*—One unit.

(4) *Solid Geometry.*—One-half unit.

(5) *Plane Trigonometry.*—One-half unit.

HISTORY.—Four units.—

(1) Ancient History, with particular reference to Greece and Rome.....1 unit
(2) European History since Charlemagne.....1 unit
(3) English History .....1 unit
(4) American History .....1 unit

A year's work based on a good text-book of at least 300 or 400 pages is required in the case of each of the above divisions. The student should know something of the author of the text-book used and give evidence of having consulted some works of reference.

LATIN.—Four units.—At least four years' work in this study is required to cover the four units. The minimum for each year is as follows:

*This course represents only one-half unit on the Carnegie unit scale.

(1) *First Year.*—One unit.—A first year Latin book, such as Collar & Daniell's First Year Latin or Potter's Elementary Latin Course.

(2) *Second Year.*—One unit.—Four books of Caesar's Gallic War, with constant study of the grammar and constant practice in prose composition.

(3) *Third Year.*—One unit.—Six of Cicero's Orations, with grammar and prose composition throughout the year.

(4) *Fourth Year.*—One unit.—The first six books of the Aeneid and as much prosody as relates to accent, versification in general and dactylic hexameter.

MODERN LANGUAGES.—Two units.—Both units in a modern language should be offered; if only one is offered, the student will be required to pursue the subject a second year in the University.

French.—First Year.—One unit.—(1) Drill in pronunciation; (2) the rudiments of grammar, including the elementary rules of syntax; (3) abundant easy exercises; (4) the reading of from 100 to 175 duodecimo pages of graduated texts, with constant practice in translating into French easy variations of the sentences read (the teacher giving the English) and in reproducing from memory sentences previously read; (5) writing French from dictation.

French.—Second Year.—One unit.—(1) The reading of from 250 to 400 pages of easy modern prose; (2) constant practice in translating into French easy variations upon the texts read; (3) frequent abstracts, sometimes oral and sometimes written, of portions of the text already read; (4) writing French from dictation; (5) continued drill upon the rudiments of grammar, including forms and syntax, with constant application in the construction of sentences; (6) memorizing of short poems.

German.—First Year.—One unit.—(1) Drill in pronunciation; (2) the memorizing and frequent repetition of easy colloquial sentences; (3) drill upon the rudiments of grammar, including the elementary rules of syntax and word-order; (4) abundant easy exercises; (5) the reading of from 75 to 100 pages of graduated texts, with constant practice in translating into German easy variations upon sentences selected from the reading-lesson (the teacher giving the English) and in reproducing from memory sentences previously read.

German.—Second Year.—One unit.—(1) The reading of from 150 to 200 pages of easy stories and plays; (2) practice in the translation into German of easy variations upon the matter read and also in the off-hand reproduction, sometimes orally and sometimes in writing, of the substance of short and easy selected passages; (3) continued drill upon the grammar; (4) memorizing of short poems.

Spanish.—Requirements similar to those for French, which see.

AGRICULTURE.—One unit.—Study of Duggar's Agriculture for Southern Schools and Bailey's The Nursery Book, or their equivalents. At least one-third of the time should be devoted to laboratory practice, field work, and visits to successfully and unsuccessfully conducted farms and fruit plantations.

PHYSICAL GEOGRAPHY.—One unit.—Study of a modern text-book, together with laboratory and field course, covering the following subjects: (1) The earth as a globe: shape, how proved; size, how measured; motions, how determined; map making; different modes of projection. (2) The ocean: forms and divisions; depth, density, temperature; movements, waves and currents; character of floor; life in; tides, character and causes; shore lines. (3) The atmosphere: chemical composition and pressure, how determined; circulation of, character and cause; storms, classification and cause of. (4) Land: amount and distribution of; topographic charts; plains and plateaus, kinds and development of; volcanoes, distribution and character of; rivers, life-history of; glaciers, kinds and characteristics of.

BOTANY.—One-half or one unit.—Anatomy and morphology; physiology; ecology; the natural history and classification of the plant groups. Individual laboratory work by the student should receive at least double the amount of time devoted to recitation.

ZOOLOGY.—One-half or one unit.—Study of a standard high school text and, in addition to the theoretical work, dissection of at least ten specimens. Note-books with drawings, showing the character of the work completed, must be presented on entrance to the University.

PHYSICS.—One unit.—Study of a standard high school text; experimental work consisting of lecture-table demonstrations and individual laboratory work. The latter should comprise at least thirty exercises from a good laboratory manual.

CHEMISTRY.—One unit.—Individual laboratory work, comprising at least thirty exercises from a recognized manual; instruction by lecture-table demonstration; study of a standard text-book.

ADVANCED STANDING

Advanced standing will be granted only upon recommendation of the heads of the departments concerned. Fitness for advanced work may be determined by examination or by trial. Students from other colleges or universities of like standing will ordinarily be classified according to the ground already covered.

SPECIAL STUDENTS

Provision is made for students desiring to take special courses. (See page 27.)

ORGANIZATION

The University adopted in 1910 the organization and nomenclature recommended by the National Association of State Universities. In accordance with this the following divisions of the work of the institution have been made:

I. The Graduate School.
II. The College of Arts and Sciences:
  (a) A Curriculum leading to the A.B. degree.
  (b) A Curriculum leading to the B.S. degree.
III. The College of Agriculture:
  A Curriculum leading to the degree of B.S. in Agriculture.
IV. The College of Engineering:
  (a) A Curriculum leading to the B.S. degree in Civil Engineering.
  (b) A Curriculum leading to the B.S. degree in Electrical Engineering.
  (c) A Curriculum leading to the B.S. degree in Mechanical Engineering.
V. The College of Law:
  A Curriculum leading to the degree of LL.B.
VI. The Teachers College and Normal School:
  (a) A Curriculum leading to the A.B. degree in Education.
  (b) A Curriculum leading to the B.S. degree in Education.
  (c) A Normal Course leading to a Diploma.
  (d) The University Summer School.
VII. The Division of University Extension:
  (a) Institutes.
  (b) Farmers' Cooperative Demonstration Work.
  (c) Boys' and Girls' Clubs.
  (d) Correspondence Courses.
VIII. The Agricultural Experiment Station.
IX. State Nursery Stock Inspection.

GRADUATE SCHOOL

ORGANIZATION.—The work in this school is under the direction of the Committee on Graduate Work, which consists of Professors Anderson, Vernon, Benton, and Thackston.

Graduate students should register with the Chairman of this Committee.

DEGREES OFFERED.—The University is not in a position at present to lay any great stress upon graduate work. Its courses are mainly of college grade and will doubtless remain so for many years to come. For the benefit, however, of those who wish to carry their studies further, courses are offered leading to the degrees of Master of Arts, Master of Arts in Education, Master of Science, Master of Science in Agriculture and Master of Science in Education.

PREREQUISITE DEGREES.—Candidates for the Master's degree must possess the Bachelor's degree of this institution or of one of like standing.

APPLICATIONS.—Candidates for the Master's degree must present to the Chairman of the Committee on Graduate Work a written application for the degree not later than the first of November in the scholastic year in which the degree is desired. This application must name the major and minor subjects offered for the degree and must contain the signed approval of the heads of the departments concerned.

TIME REQUIRED.—The student must spend at least one entire academic year in residence at the University as a graduate student, devoting his full time to the pursuit of his studies.

WORK REQUIRED.—The work is twelve hours per week. Six hours of this work must be in one subject (the major) and of a higher grade than any course offered for undergraduate students in that subject. The other six hours (the minor or minors) are to be determined and distributed by the professor in charge of the department in which the major subject is selected. No course designed primarily for students of a lower grade than the Junior class will be acceptable as a minor. While the major course is six hours, these hours are not the same as in undergraduate work. This means that the professor has the privilege of using the six hours for recitations or

examinations, but the student will find that considerably more time is required to prepare for one of these recitations than is the case in an undergraduate course. To obtain credit for a minor the student must attain a grade of not less than eighty-five per cent.

DISSERTATION.—It is customary to require a dissertation showing original research and independent thinking on some subject accepted by the professor under whom the major work is taken, but this requirement may be waived at the option of the professor, subject to the approval of the Committee on Graduate Work. If the requirement be not waived, the dissertation must be in the hands of the committee not later than two weeks before Commencement Day.

COLLEGE OF ARTS AND SCIENCES

JAS. N. ANDERSON, *Dean*

FACULTY—Jas. N. Anderson, O. C. Ault, J. R. Benton, L. L. Bernard, L. W. Buchholz, H. W. Cox, C. L. Crow, H. S. Davis, J. M. Farr, E. R. Flint, W. L. Floyd, H. G. Keppel, N. L. T. Nelson, W. S. Perry and E. S. Walker.

GENERAL STATEMENT

AIM AND SCOPE.—The tendency of universities at the present time seems to be to reach out their arms farther and farther into the domain of knowledge and to become more and more places where the student may expect to be able to acquire any form of useful knowledge in which he may be interested. In the center, however, there is still found the College of Arts and Sciences, the pulsating heart, as it were, sending its vivifying streams to the outermost tips of the institution.

The aim of this college is to prepare for life, it is true, but not so directly and immediately as do the professional schools. It is a longer, but a better road, for those who are able to travel it, to distinction and ultimate success in almost any calling. Especially in the case of the learned professions, it is becoming clearer that a man should first get a liberal education, if possible, before entering upon his professional studies.

The purpose and aim of the College of Arts and Sciences is to impart culture and refinement, to train the mind and strengthen the intellect, to build up ideals and establish the character, to enlarge the vision, to ennoble the thoughts, to increase the appreciation of the beautiful and the true, to add charm to life and piquancy to companionship, to make the man a decent fellow, a useful citizen, an influential member of society in whatever community he may be thrown, in whatever field his life-course may be run.

But if the student wishes to examine the practical side exclusively, he will find that there is also something practical in all these courses. For instance, they are all valuable for him who wishes to learn to teach those subjects. Moreover, the use of electives gives the student an opportunity to specialize

in some branch according to his inclination and in furtherance of his plans.

ADMISSION.—For full description of requirements for admission and of unit courses, see pages 36 to 44, inclusive.

LITERARY SOCIETIES.—The Literary Societies are valuable adjuncts to the educational work of the college. They are conducted entirely by the students and maintain a high level of endeavor. The members obtain much practical experience in the conduct of public assemblies. They assimilate knowledge of parliamentary law, acquire ease and grace of delivery, learn to argue with coolness of thought and courtesy of manner and are trained in thinking and in presenting their thought clearly and effectively while facing an audience. All students are earnestly advised to connect themselves with one of these societies and to take a constant and active part in its work.

DEGREES.—The College of Arts and Sciences offers courses leading to the degrees of Bachelor of Arts (A. B.) and Bachelor of Science (B. S.).

SUBJECTS OF STUDY.—The subjects of study leading towards the degrees offered by the College of Arts and Sciences are divided into the following four groups:

I.	*II.*	*III.*	*IV.*
Military Science, I and II.	French, German, Greek, Latin, Rhetoric and English Language, Spanish.	Bible, Economics, Education, English Literature History, Philosophy, Political Science, Psychology, Sociology.	Agriculture, Astronomy, Bacteriology, Biology, Botany, Chemistry, Drawing, Descriptive Geometry, Geology, Mechanics, Military Science III, Physics, Physiology, Surveying, Zoology.

REQUIREMENTS FOR DEGREES.—For each of the degrees offered, A.B. and B.S., a total of sixty-two hours must be taken, of which two must be in Group I.

For the A.B. degree it is further provided that fifteen hours must be taken in each of Groups II and III and twelve hours from Group IV; three hours may be chosen from any group; the remaining fifteen hours (including the "major") must be chosen from Groups II, III and (pure) Mathematics.

For the degree of B.S. twelve hours must be taken from each of Groups II and III, twenty-four (including the "major") from Group IV, leaving twelve hours to be chosen from the subjects mentioned above.

The "major" must consist of nine hours in one department and must be approved by the head of the department chosen. The choice of electives must meet with the approval of the Dean.

CURRICULUM

Leading to the Degree of Bachelor of Arts

Freshman Year

NAMES OF COURSES	NATURE OF WORK	HOURS PER WEEK
English I	Rhetoric	3
French I or German I or Spanish I or Greek I or Latin I	Elementary Course Elementary Course Elementary Course Elementary Course Livy, Ovid, Terence	3
History I	Modern European History	3
Mathematics I	Plane Analytic Geometry, College Algebra	3
Military Science I	Regulations	1
Elective		3
		16

Sophomore Year

Group II	3
Group III	3
Group IV	3
Military Science II	1
Group II or III or in both	6
	16

CURRICULUM

Leading to the Degree of Bachelor of Science

Freshman Year

NAMES OF COURSES	NATURE OF WORK	HOURS PER WEEK
English I	Rhetoric	3
Botany I	General Botany	3
French I or German I or Spanish I or Greek I or Latin I	Elementary Course Elementary Course Elementary Course Elementary Course Livy, Ovid, Terence	3
Mathematics I	Plane Analytic Geometry, College Algebra	3
Military Science I	Regulations	1
Elective		3
		16

Sophomore Year

Group II	3
Group III	3
Group IV	9
Military Science II	1
	16

In the Junior and Senior years candidates for either of the degrees offered must choose their studies so as to conform to the general "Requirements for Degrees" of this College.

REQUIREMENTS FOR DEGREES FOR STUDENTS ADMITTED BEFORE SESSION 1913-14.—The regulations printed above went into effect with the school year 1913-14. Students previously admitted to the College of Arts and Sciences will be held to the requirements for degrees in force when they entered.

DEPARTMENTS OF INSTRUCTION

ANCIENT LANGUAGES

Professor Anderson

The study of the classics contributes largely to general culture. In addition to the recognized and peculiar disciplinary value of such studies and their conspicuous service in cultivating the literary sense and developing literary taste, they have a more immediate value and office as aids to the comprehension and interpretation of modern languages and literatures. A thorough study and a full understanding of the modern languages, especially the Romance languages and our own tongue, demand a considerable preliminary acquaintance with Latin and Greek. Thus from two points of view, that of their own intrinsic beauty and value as culture studies and that of subsidiary aids to the study of other and modern languages, Latin and Greek command our attention and call for a large place in any curriculum which proposes to issue in a liberal education.

The following courses are offered for the coming year:

LATIN

LATIN I.—Ovid, about 2,000 verses selected from his various works, but mainly from the Metamorphoses; Versification, with especial reference to the Dactylic Hexameter and Pentameter; Livy, selections, amounting to about two books. (3 *hours.*)

LATIN II.—Selections from the Letters of Cicero and Pliny; selections from the Satires, Epistles, Odes, and Epodes of Horace, with a study of the Horatian Metres. (3 *hours.*)

LATIN III.—Juvenal's Satires, with some omissions; Tacitus, parts of the Histories or Annals; selections from Catullus, Tibullus, Propertius and Ovid. (3 *hours.*)

LATIN IV.—Several plays of Plautus and Terence; Tacitus, Germania and Agricola; selections from Seneca, Gellius and Quintilian. (3 *hours.*)

LATIN V*b*.—History of Roman Literature, preceded by a short study of Roman Life and Customs. (*Second semester;* 3 *hours.*)

LATIN VI.—Grammar and Prose Composition; an intermediate course in Prose Composition adapted to the needs of students taking Latin I or Latin II and consisting of weekly

written exercises and some oral work; in connection with this there will be a general review of Latin Grammar with some more advanced work, both in forms and syntax. (2 *hours.*)

GREEK

GREEK I.—The forms and most important principles of the syntax; numerous exercises, partly oral, partly written, and some practice in conversation and sight reading. One book of Xenophon's Anabasis, with exercises in Prose Composition and study of the Grammar. (3 *hours.*)

GREEK II.—Xenophon's Anabasis, Books II, III and IV; selections from Lucian and the easier dialogues of Plato; sight translation; Prose Composition; Grammar. (3 *hours.*)

GREEK III.—Select orations of Lysias or other Attic orators, with informal talks on Athenian Laws and Customs; parts of the Iliad and Odyssey of Homer; Prosody. (3 *hours.*)

GREEK IV.—Selections from the Greek historians, especially Herodotus and Thucydides; from the Greek dramatists, especially Euripides and Sophocles; from the lyric fragments of Alcaeus, Sappho, etc. (3 *hours.*)

GREEK V*a*.—A study of the history of Greek Literature, preceded by a short study of Greek Life and Customs. A knowledge of the Greek language is highly desirable, but is not required for this course. (*First semester;* 3 *hours.*)

GREEK VI.—Grammar and Prose Composition; an intermediate course in Prose Composition adapted to the needs of students taking Greek III or Greek IV and consisting of weekly written exercises and some oral work; in connection with this there will be a general review of Greek Grammar with some more advanced work, both in forms and syntax. (2 *hours.*)

GREEK VII.—Selections from the Septuagint and from the New Testament; class and parallel translations; vocabulary, grammar and stylistic features stressed. (3 *hours.*)

BIBLICAL INSTRUCTION

Professor Buchholz

The following courses are offered to Juniors and Seniors, embracing such aspects of Biblical study as the University is prepared to give, with a view to providing a major subject in the Bachelor of Arts curriculum which will permit students to begin preparation for such work as Secretary or Physical Director of the Young Men's Christian Association, for welfare

work in mills or social settlements or for the ministry. The courses offered will be conducted by the instructors in the departments under which the various aspects of the subject naturally fall and will be given in a spirit free from any narrow sectarianism.

BIBLE. I*a*.—*Old Testament History.*—The student will be made familiar with the history of the Israelitish nation as narrated in the historical books of the Old Testament; the connections between sacred and profane history will be discussed; and some conception of the development of the cultural life of the nation will be gained.

BIBLE I*b*.—*New Testament History.*—The student will use as a text primarily the New Testament itself. A thorough knowledge of the story of the life of Christ and the development of the early church under the ministry of the Apostles will be the main end in view. A correlation of this with world history and lectures on wider reaches of the subject will be attempted. (3 *hours. Professor Buchholz.*)

BIBLE II.—*The English Bible as Literature.*—The various literary types found in the Bible will be studied and the excellence of the work as compared with other great examples of literature will be discussed. The diction of the 1611 version will be compared with that of earlier and more recent translations and its effect upon English literature will be demonstrated. (3 *hours. Professor Farr.*)

BIBLE III.—*Old and New Testament Greek.*—See Greek VII. (3 *hours. Professor Anderson.*)

BIBLE IV.—*The Bible as an Ethical and Religious Guide.*—Consideration of the Bible as a guide for human conduct. Those parts of the Old and the New Testaments which bring out most vividly and directly the moral and religious elements will receive most attention. The course will aim to give each student that appreciation of the Bible which all should have. Lectures, Bible readings, studies of great sermons and a text on Evidences of Christianity suggest in a general way the nature of the course. (3 *hours. Professor Cox.*)

BIOLOGY AND GEOLOGY

For a description of the laboratories and collections of this department, see pages 20 and 22.

ZOOLOGY

Professor Davis

ZOOLOGY I.—*General Zoology.*—Typical examples illustrating the various groups of the animal kingdom are studied, the object being to give the student a comprehensive idea of the structure, physiology and activities of animals. (3 *hours.*)

ZOOLOGY II.—*Histology and Physiology.*—A study of the microscopic structure and physiology of the principal tissues and organs of both vertebrates and invertebrates, special attention being paid to mammals. Thorough training is given in the more important methods of investigation. (3 *hours.*)

ZOOLOGY III*b.*—*Entomology.*—Careful attention is given to the structure of insects in general, after which the insect orders are considered, the student being expected to recognize the various orders and the more common families. Emphasis is given to the economic side of entomology.—(*Second semester;* 3 *hours.*)

ZOOLOGY IV.—*Vertebrate Morphology.*—Recitations and lectures on the comparative anatomy of vertebrates, accompanied by laboratory work on representatives of the principal groups. (3 *hours.*)

ZOOLOGY V.—*Vertebrate Embryology.*—Recitations and lectures on the development of vertebrates, with special reference to the chick. Laboratory work on the development of the chick. (3 *hours.*)

ZOOLOGY VI*b.*—*General Biological Problems.*—Lectures and collateral reading on such general problems as variation, adaptation, heredity and organic evolution. Special attention is paid to the results of recent experimental work. (*Elective, subject to the permission of the instructor; second semester;* 3 *hours.*)

ZOOLOGY VII*a.*—*Physiology and Hygiene.*—Lectures and recitations on general physiology, hygiene and sanitation. (*First semester;* 3 *hours.*)

BACTERIOLOGY

Professor Davis

Dr. Nelson

BACTERIOLOGY I*a.*—*General Bacteriology.*—A general introduction to bacteriology, designed to afford the student a comprehensive knowledge of bacteria and their relation to

every-day life. (*Prerequisite, Chemistry* I; *first semester;* 3 *hours.*)

BACTERIOLOGY II*b*.—*Agricultural Bacteriology.*—Special attention is given to the bacteria of soil and dairy products, with some consideration of the bacterial diseases of animals and plants. (*Second semester;* 3 *hours.*)

BACTERIOLOGY III*b*.—*Advanced Bacteriology.*—Laboratory work with collateral reading along special lines adapted to the needs of the individual student. (*Second semester;* 3 *hours.*)

GEOLOGY

Professor Davis

GEOLOGY I*a*.—*General Geology.*—A short course in dynamical, structural and historical geology. (*First semester;* 3 *hours.*)

BOTANY

Professor Floyd
Dr. Nelson

The department is well equipped for carrying on the work. It has large, well lighted laboratories, a description of which will be found on page 21. Plants for study can be easily obtained at all seasons of the year. The flora of the vicinity is rich in the number of important species and additional material may be secured from the horticultural grounds.

BOTANY I.—*General Botany.*—The study in the classroom and laboratory of the structure, morphology, evolution and classification of plants. Work is done on special types, beginning with the simplest and advancing to the more complex. Field work is undertaken during the spring months. (3 *hours.*)

BOTANY II*a*.—*Plant Physiology.*—The life processes of plants, such as how water is taken up and disposed of, relation to the soil, nutrition, respiration, irritability, etc., are directly investigated. Much of this is done in the laboratory and garden. (*First semester;* 3 *hours*).

BOTANY III*b*.—*Histology and Plant Anatomy.*—The structure and development of plant tissues in relation to their function. Practice is given in fixing, staining and mounting microscopic slides. (*Second semester;* 3 *hours.*)

BOTANY IV*a*.—*General Morphology of Thallophytes.*—Designed for students desiring advanced work on the algae and

fungi with reference to classification, differentiation and morphology. Fresh water algae will be studied from living specimens in the laboratory, and students will make permanent microscopical slides of the species studied. Many of the marine algae will be studied from preserved specimens. The study of the fungi prepares for Plant Pathology the following semester. The field work will consist of the collecting and identification of the fungus flora of this vicinity. (*Prerequisite, Botany* I; *first semester;* 3 *hours.*)

BOTANY V*b.*—*General Morphology of the Higher Plants.*—A study of the Bryophytes, Pteridophytes, and Spermatophytes with reference to classification, morphology and differentiation. In the field work and in the laboratory the student will learn to recognize all the common liverworts, mosses, ferns, fern allies and conifers, and the more important groups of the Monocotyledons and Dicotyledons, especially those of economic importance. (*Prerequisite, Botany* I; *second semester,* 3 *hours.*)

BOTANY VI*a.*—*Plant Pathology.*—The nature and causes of plant diseases, especially those due to parasitic fungi. Laboratory and field work on forms of greatest economic importance in the State. (*First semester;* 3 *hours.*)

BOTANY VII*b.*—*Plant Pathology* (*Advanced.*)—Methods of culture and investigation of organisms causing plant diseases. This course is intended to prepare students for original investigation. (*Second semester;* 3 *hours.*)

CHEMISTRY

Professor Flint

The facilities for instruction in chemistry compare favorably with those of the larger institutions of the South and are being steadily improved. The department is equipped with the necessary apparatus and material for instruction in general inorganic and organic, analytical and industrial chemistry. See page 21.

A course in general inorganic chemistry is given the first year. The second year is devoted mainly to qualitative, the third to quantitative analysis. Because of the electives offered, a student can get four years of chemistry and specialize in analytical work in the fourth year. Abundant laboratory work is offered in all courses.

CHEMISTRY I.—*General Inorganic Chemistry.*—During the first semester, the non-metallic elements are studied by means of text-book, lectures and recitations. Special attention is given to the principles underlying chemical union and to the theories and laws which govern the science. In the second semester the metals and their more important compounds are studied. (3 *hours.*)

CHEMISTRY II.—*Laboratory Course in General Chemistry.* —In order to impress upon their minds the principles of the science, students are required to repeat in the laboratory many of the experiments seen in the lecture-room, take notes of the same and, as far as possible, write the chemical reactions. Each student is required to perform more than a hundred experiments illustrating chemical principles and including the preparation of many of the elements and their most important compounds. In the second semester the laboratory work is designed to study the reactions of the metals with a view to their classification, a portion of the time being devoted to dry analysis. (2 *exercises a week.*)

CHEMISTRY III.—*Laboratory Course in Qualitative Analysis.*—(3 *exercises a week.*)

CHEMISTRY IV.—Course III, with two additional exercises a week. (5 *exercises a week.*)

CHEMISTRY V.—*Organic Chemistry.*—Lectures, recitations and laboratory work. The laboratory work is designed to illustrate the principles studied in the text, as well as to give practice in making pure organic preparations. (3 *hours.*)

CHEMISTRY VI.—*Chemical Technology.*—Consideration of chemical principles involved in manufacturing and refining products of commercial importance. Thorp's "Outlines of Industrial Chemistry" is used as a text and occasional lectures are given. Among the subjects studied are: fuels, sulphuric acid, the soda and chlorine industries, fertilizers, cements, glass, pigments, coal tar, mineral oils, soap, starch, sugar, fermentation industries, explosives, textiles, paper and leather. Visits are made to such factories and chemical plants as may be accessible. (3 *hours.*)

CHEMISTRY VII.—*Quantitative Analysis.*—(*Senior elective;* 3 *hours.*)

CHEMISTRY VIII.—Exercises in quantitative analysis illustrating the operations involved in the gravimetric, volumetric and electrolytic methods in vogue. During the second semes-

ter the exercises are so arranged as to aid the individual student in preparing for his life-work—medicine, pharmacy, analytical chemistry, etc. (*7 hours.*)

CHEMISTRY IX*a* or *b*.—Lectures in agricultural chemistry, embracing the chemistry of soils, the atmosphere, plant and animal growth and feeding, fertilizers, dairy products, insecticides, etc. (*Either Semester; 3 hours.*)

ENGLISH LANGUAGE AND LITERATURE

Professor Farr

The work is designed to meet the requirements for a practical and liberal education, and is regarded both as a necessary auxiliary to the training in the technical courses and as an important factor among the liberalizing studies. The three sides of the subject, Rhetoric, Linguistics and Literature, are presented as fully as time will permit. Rhetoric and composition are stressed in the lower classes, literary studies and linguistic work in electives; nevertheless the attempt is made to keep the three viewpoints before all classes as necessary to a mastery of their native language.

ENGLISH I.—*Advanced College Rhetoric.*—Designed to train the students in methods of clear and forceful expression. Instruction is carried on simultaneously in formal rhetoric, in rhetorical analysis and in theme writing, the constant correlation of the three as methods of approach to the desired goal being kept in view. In addition a private reading course is assigned to each student. (*Required of all Freshmen; 3 hours.*)

ENGLISH II*a*.—*Development of English Prose.*—This will follow the method of Minto's Manual in tracing historically the growth of English prose literature, supplemented by collateral readings and by essays. (*First semester; 3 hours.*)

ENGLISH II*b*.—*Development of English Poetry.*—A continuation of the first semester's work, applying the method outlined to the study of English poetry. (*Second semester; 3 hours.*)

ENGLISH III*a*.—*Milton and the Epic.*—A study of Paradise Lost, around which are grouped studies in the Age of Milton and in the Epic as a type in Comparative Literature. The first four books of the poem are read in class. Written reviews on the remaining books alternate each week with essays from the

student and lectures by the instructor. A reading course in the minor poets of the age and in the English translations of the great epics is assigned to each student. (*First semester; 3 hours.*)

ENGLISH III*b*.—*Shakespeare and the Drama.*—This course follows the above method. Three of the Shakespearian plays are read in class. On eight others a written review is held each fortnight and on the alternate week essays are written by the students and lectures are given by the instructor. Readings in the English drama from the Cycle plays to contemporary production are assigned. (*Second semester; 3 hours.*)

ENGLISH IV*a*.—*American Poetry.*—A rapid survey of the development of poetry in the United States, followed by a critical study of a few of the more important authors (Bryant, Whittier, Longfellow, Emerson, Lowell, Poe). (*First semester; 3 hours.*)

ENGLISH IV*b*.—*Southern Literature.*—A detailed study of the literature of the South with extensive reading and essay work and an examination of the claims of Florida authors. (*Second semester; 3 hours.*)

ENGLISH V.—*The English Novel.*—This subject is studied from the two sides of chronological development and of technique; the student reads a list of novels chosen to illustrate chronology and variety of species, analyzes minutely one novel from the technical side, masters the entire work and life of one novelist and compares closely a novel and a dramatized version of it. It is hoped the student may be so grounded in the classics and his taste and judgment so trained that his reading in this class of literature may not become mere intellectual dissipation. (3 *hours.*)

ENGLISH VI.—*The Romantic Revival.*—Planned as a study in literary movement. The causes and forces which underlie the movement, its phenomena and the authors and works which exhibit them and a comparison with other movements in literature will be considered. The work of Prof. Beers will be used as a basis and the student will be led, by means of extensive reading, by investigation and essays and by lectures on the wider ranges of the subject, to realize the truth of his statements. (3 *hours.*)

ENGLISH VII.—*Anglo-Saxon Grammar and Reading.*—Drill in the forms of the early language and an elementary view of its relations to the other members of the Aryan family

and of its development into Modern English. The texts in Bright's Anglo-Saxon Reader are studied and Cook's edition of Judith is read. (3 *hours.*)

ENGLISH VIII.—*Chaucer and Middle English Grammar.*—During the first semester, the works of Chaucer are read in and out of class. The pronunciation, grammatical forms, scansion, condition of text, analogues and sources are closely examined. During the second semester, Morris and Skeats' Specimens, Part II, is studied in connection with informal lectures on Middle English viewed as developing from Anglo-Saxon into Modern English. (*Prerequisite; English VII;* 3 *hours.*)

ENGLISH IX.—*Engineering Exposition.*—This course will attempt to give special training to the Engineering student in the preparation of the various kinds of writing that he will be called upon to do in the pursuit of his profession. It will consist largely of the writing of papers (upon subjects assigned by the departments in the College of Engineering), which will be criticised and revised. (*Engineering Seniors;* 1 *hour.*)

HISTORY AND ECONOMICS

Professor Ault

The purpose of the courses offered in this department is to train students to use historical and economic material with discrimination; to develop a general knowledge of European, English and American History, so indispensable to a general college course and especially to a study of the Social Sciences; to furnish students with a survey of economic life and thought, such as every educated man is now supposed to have; and to explain the economic principles lying back of our present day wealth getting and wealth dispensing activities.

Students entering the University for the first time who have not had satisfactory courses in European or American History are advised to include these subjects in their courses of study as a general cultural foundation for their other work. With these should be included Economics I, which is a prerequisite to the other courses offered in Economics.

HISTORY

HISTORY I.—*European History.*—A general survey of the growth of civilization in Europe from the earliest times to the present. Emphasis given to the eighteenth, nineteenth and twentieth centuries. (3 *hours.*)

HISTORY II*a*.—*The American Colonies to 1763*.—European background of colonial history; the discovery and settlement of America; the development of the social, economic and political life of the colonies; and the growth of American institutions. (*First semester;* 3 *hours.*)

HISTORY II*b*.—*Early History of the United States, 1763-1850*.—The causes of the Revolution; the struggle for independence; the formation of the government; its early operation; the origin and growth of political parties; and the development of the nation. (*Second semester;* 3 *hours.*)

HISTORY III*a*.—*Recent History of the United States, 1850-1915*.—The slavery conflict; the Civil War; the period of reconstruction in the South; the industrial expansion; the rise of political issues; and the United States as a world power. (*First semester;* 3 *hours.*)

HISTORY III*b*.—*European History, 1815-1915*.—Reconstruction of Europe after the overthrow of Napoleon; industrial revolution and social conditions; the revolutions of 1830 and 1848; the unification of Italy and of Germany; the commercial and industrial growth of Germany and Great Britain; the awakening of Russia; the Near Eastern question; European colonial possessions in Africa; and the intellectual and cultural progress during the century. (*Second semester*; 3 *hours.*)

HISTORY IV.—*English History*.—An elementary outline course, emphasizing the struggle for constitutional government; the international struggle for commercial and colonial supremacy; the industrial revolution; and social and political reforms. (3 *hours.*)

ECONOMICS

ECONOMICS I.—*Principles of Economics*.—The leading facts regarding business, money, banking, industrial organization, labor, taxation, tariffs and governmental regulation. (3 *hours.*)

ECONOMICS II*a*.—*Money and Banking*.—A brief historical treatment of banks and banking together with the principles which underlie the successful operation of these institutions. (*First semester;* 3 *hours.*)

ECONOMICS II*b*.—*Corporation Finance*.—The rise, growth and development of large business organizations; pools, trusts, corporations and holding companies; the rights of "vested

interests"; monopolistic tendencies; governmental regulation, etc. (*Second semester;* 3 *hours.*)

ECONOMICS III*a*.—*Public Finance and Taxation.*—A course dealing with the revenues and expenditures of public bodies, federal, state, and local; the problems of budgetary reform and taxation; the leading features of European systems of finance; and proposals for social reform. (*First semester;* 3 *hours.*)

ECONOMICS III*b*.—*Transportation.*—The problems of transportation; public and private interests involved; the principles of regulation; and the judicial control of common carriers. (*Second semester;* 3 *hours.*)

ECONOMICS IV*a*.—*Economic History of the United States.*—A general but comprehensive study of the growth of American industry and commerce with the social and economic problems involved. (*First semester;* 3 *hours.*)

ECONOMICS IV*b*.—*Labor Problems.*—A brief history of industrial labor problems in Europe and America; trade unions; employers' associations; and social reforms. (*Second semester;* 3 *hours.*)

NOTE.—With the exceptions of courses I and II in History and course I in Economics the above courses will alternate from year to year. Courses III in History and II in Economics will not be given in 1915-1916.

MATHEMATICS AND ASTRONOMY

Professor Keppel

MATHEMATICS

The work in the Department of Mathematics is planned with a threefold purpose in view:

1. For students who intend to *specialize* in Mathematics it provides the preparation for more advanced work. Several advanced courses are offered each year for this class of students.

2. To those who need Mathematics as an *instrument* it offers opportunities to become familiar with this instrument. The application of Calculus not only to Physics, Chemistry and Engineering, but even to such seemingly remote realms as Psychology and Political Economy, makes it advisable that this class should continue the study of Mathematics at least so far as to include Calculus.

3. To others it gives logical training in Analysis and Proof, introduces them to that scientific method par excellence of the Hypothesis and develops the idea of a deductive system in its classical form.

The following courses are offered each year:

MATHEMATICS A.—Solid Geometry. (2 *hours.*)

MATHEMATICS B.—Plane and Spherical Trigonometry. (2 *hours.*)

MATHEMATICS I.—Plane Analytic Geometry and College Algebra. (3 *hours.*)

MATHEMATICS II.—Spherical Trigonometry and Elementary Calculus. (1 *hour.*)

MATHEMATICS III.—Differential and Integral Calculus. (3 *hours.*)

MATHEMATICS IV.—Solid Analytic Geometry and Calculus. (2 *hours.*)

MATHEMATICS V.—Advanced Calculus and Differential Equations. (3 *hours.*)

The following advanced courses were given in 1914-15:

MATHEMATICS VI.—Theory of Equations and Modern Higher Algebra. (3 *hours.*)

MATHEMATICS VII.—Modern Projective Geometry. (3 *hours.*)

ASTRONOMY

In connection with the Department of Mathematics a course in GENERAL ASTRONOMY is offered, consisting of lectures and recitations, with practical exercises. No knowledge of advanced mathematics is presupposed. (2 *hours.*)

MILITARY SCIENCE AND TACTICS

Major Walker

Military instruction is *not optional,* but is required by law—by the law of the United States and by the law of the State.

The instruction is both practical and theoretical. The practical course consists of drills, target practice and other military exercises. The drills proper do not exceed three hours per week.

The course in military science is necessary for graduation and is, except as noted below, required of all students.

EXCUSED FROM MILITARY DUTY.—Law students, graduates, Seniors, adult specials, those holding discharges from the U. S. army, navy or marine corps after at least one term of enlistment, and the physically disqualified.

The physically disqualified will be required to submit a certificate to that effect from the resident physician and will also, prior to graduation, be required to make up an equivalent amount of work in this or some other department.

Those who have served for three years in the national guard will be excused from drills and, provided they pass an examination under the Professor of Military Science and Tactics, also from theoretical work.

Students will be given credit, year for year, for work done at military schools having army officers as instructors.

Those taking the One-Year or Two-Year Course in Agriculture will be excused from the theoretical, but not from the practical course.

Juniors in the Teachers College will be excused.

All applications to be excused from military duty for other reasons must be submitted to the Professor of Military Science and Tactics and all who are required to take military work must report to him within five days after registering at the University.

The theoretical course set forth below consists of recitations, supplemented by lectures.

MILITARY SCIENCE I.—(a) Infantry Drill Regulations; (b) Small-arms Firing Regulations. (*Required of Freshmen; 1 hour.*)

MILITARY SCIENCE II.—Field-service Regulations, Company Administration, Camp Sanitation and Military Map Reading. (*Required of Sophomores; 1 hour.*)

MILITARY SCIENCE III.—The Service of Security and Information, Elementary Military Engineering, Army Regulations and similar subjects. (*Elective for Juniors and Seniors; 2 hours.*)

MODERN LANGUAGES

Professor Crow

French, German and Spanish are the subjects taught. Extensive courses of reading, in and out of class, frequent exercises, oral and written, and studies in literature and language form the chief feature of instruction. Carefully

prepared English abstracts of nearly all the parallel reading is required.

Authors and text-books vary from year to year. Though the classics are not neglected, special attention is paid to the literatures of the Nineteenth Century.

Since the session of 1906-07 tables have been set apart in the dining-hall for those wishing to speak German and Spanish.

All the courses offered will not be given in any one year.

FRENCH

FRENCH I.—*Elementary Course.*—Drill in pronunciation and important grammatical forms, elementary syntax, dictation, daily written exercises, memorizing of vocabularies and short poems, translation. (3 *hours.*)

FRENCH II.—*Intermediate Course.*—Work of elementary course continued, advanced grammar, including syntax, prose composition, translation of intermediate and advanced texts, sight reading, parallel. (3 *hours.*)

FRENCH III.—*Advanced Course.*—Syntax, stylistic, composition, history of French literature, selections from the dramatists or novelists as class may decide. (3 hours.)

FRENCH IV.—*Romance Philology.*—(*Prerequisites, French III and Latin II;* 3 *hours.*)

GERMAN

GERMAN I.—*Elementary Course.*—Drill in pronunciation and important grammatical forms, elementary syntax, dictation, daily written exercises, memorizing of vocabularies and short poems, translation. (3 *hours.*)

GERMAN II.—*Intermediate Course.*—Work of elementary course continued, advanced grammar, including syntax, prose composition, translation of intermediate texts, sight reading, parallel. (3 *hours.*)

GERMAN III.—*Commercial German.*—For the present this course will not count towards a degree. (*Prerequisite, German II;* 2 *hours.*)

GERMAN IV.—*Advanced Course.*—Syntax, stylistic, composition, history of German literature, selections from the dramatists or novelists. (*Prerequisite, German II;* 3 *hours.*)

GERMAN V.—*Scientific Reading Course.*—The nature of the course will depend largely upon the needs of the students taking it. (*Prerequisite, German II;* 3 *hours.*)

GERMAN VI.—*Middle and Old High German.*—(*Prerequisite, German IV;* 3 *hours.*)

SPANISH

SPANISH I.—*Elementary Course.*—Drills in pronunciation and important grammatical forms, elementary syntax, dictation, daily written exercises, memorizing of vocabularies and short poems, translation. (3 *hours.*)

SPANISH II.—*Intermediate Course.*—Work of elementary course continued, advanced grammar, including syntax, prose composition, translation, parallel. (3 *hours.*)

PHILOSOPHY

Professor Cox

The primary aim of this department is to give the student a broad outlook upon life in general, as well as to give him a better understanding of his own life from psychological, ethical and metaphysical viewpoints. Philosophy lies nearer to-day than ever before to the various sciences on the one hand and to the demands of practical life on the other. Students desiring to take work in this department may begin with Course I*a*, Course II*a* or with Course III*a*. Juniors and Seniors may begin also with Course VII*a*.

Another very important aim of this department is to aid in the professional training of teachers. For description of the laboratory equipment for carrying on mental and physical tests, see page 23.

PHILOSOPHY I*a*.—*General Psychology.*—This course aims to acquaint the student with the facts and theories that are current in general psychological discussion. The study will begin with the sensations, the sense organs and the functions of the brain; the course will then deal with the higher mental functions, such as attention, perception, memory, feeling, emotion, volition, the self and like topics. (*First semester;* 3 *hours.*)

PHILOSOPHY I*b*.—*Experimental Psychology.*—This course will be mainly laboratory work. The student learns to work with the standard apparatus and becomes somewhat familiar with the current problems in Experimental Psychology. Special attention will be given to methods of psychological investigation and the collection and treatment of data. (*Second semester;* 3 *hours.*)

PHILOSOPHY II*a*.—*Ethics*.—A general course in which emphasis will be laid upon the Principles of Ethics. This will involve the study of such topics as goodness, happiness, virtue, duty, freedom, civilization and progress. Some time will also be given to the history of the various Ethical Systems. (*First semester;* 3 *hours.*)

PHILOSOPHY II*b*.—*Practical Ethics*.—A study of the moral problems of the individual and of social life. (*Second semester;* 3 *hours.*)

PHILOSOPHY III*a*.—*Logic, Inductive and Deductive*.—This course will emphasize practice in the use of syllogisms, inductive methods, logical analysis and criticisms of fallacies. (*First semester;* 3 *hours.*)

PHILOSOPHY III*b*.—*The Philosophical Poets*.—A study of the philosophical problems and their solution as given by the world's greatest poets. Such problems as Creation, Nature, Life, Freedom and Conduct will be given special attention. (*Second semester;* 3 *hours.*)

PHILOSOPHY IV*a*.—*Social Psychology*.—A study of the influences of the social environment upon the mental and moral development of the individual. (*First semester;* 3 *hours.*)

PHILOSOPHY IV*b*.—*Abnormal Psychology*.—A study of the abnormal phases of mental life. Such topics as dreams, illusions, hallucinations, suggestion, hypnotism, hysteria, diseases of the memory, diseases of the will, etc. Special attention will be given to mental hygiene. (*Second semester;* 3 *hours.*)

PHILOSOPHY V*a*.—*Genetic Psychology*.—A study of the course of development in the child from birth to adolescence. (*First semester;* 3 *hours.*)

PHILOSOPHY V*b*.—*Genetic Psychology*.—A study of animal intelligence. The purpose of this course is to give the student a better understanding of animal instincts and intelligence. (*Second semester;* 3 *hours.*)

PHILOSOPHY VI*a*.—*Philosophy of Conduct*.—A study of the problems of conduct and religion in the light of contemporary discussion. The aim of this course is to attack the problems of philosophy from the standpoint of the practical problems of every-day life. (*First semester;* 3 *hours.*)

PHILOSOPHY VI*b*.—*Philosophy of Nature*.—The aim of this course is to show Man's relation to Nature and his place in Nature. It will take up the various philosophical doctrines,

such as Animism, Pantheism, Materialism, Realism, Agnosticism, Humanism, Idealism, etc. (*Second semester;* 3 *hours.*)

PHILOSOPHY VII*a.*—*History of Ancient Philosophy.*—This course will trace the development of philosophic thought from its appearance among the Ionic Greeks to the time of Descartes. Special attention will be given to the philosophy of Plato and Aristotle. (*First semester;* 3 *hours.*)

PHILOSOPHY VIII*a.*—*Advanced Psychology.*—A study of the theoretical and practical problems in the field of modern psychology. This course introduces the student to the theoretical problems that are attracting the attention of modern psychologists. It also emphasizes the practical aspects of psychology as it is applied to Business, Law, Medicine, Education, etc. (*First semester;* 3 *hours.*)

PHILOSOPHY VIII*b.*—*Advanced Psychology.*—Continuation of VIII*a.* (*Second semester;* 3 *hours.*)

PHYSICS

Professor Benton
Mr. Perry

The work of this department is intended to meet the needs, on the one hand, of those who study physics as a part of a liberal education and, on the other hand, of those who will have to apply physics as one of the sciences fundamental to engineering.

Instruction is given by (1) recitations based upon lessons assigned in text-books; (2) laboratory work, in which the student uses his own direct observation to gain knowledge of the subject; (3) lectures, in which experimental demonstrations of the principles under discussion are given; and (4) seminar work in the advanced courses, in which the various members of the class take up different special problems requiring extended study or investigation and report upon them in turn to the class.

The physical laboratory is well equipped for the experiments usually required in undergraduate laboratory work in the best colleges. The equipment has been greatly increased in the last few years and additions are made to it from year to year. For a description, see page 22.

The following courses are offered:

PHYSICS I.—General Physics, including mechanics, heat, acoustics and optics, but not electricity and magnetism. A

knowledge of plane trigonometry is presupposed. Text-book to be used in 1915-1916: Reed and Guthe's College Physics. (1 *lecture and* 2 *recitations per week.*)

PHYSICS II.—General laboratory physics, to accompany Physics I. A knowledge of plane trigonometry is presupposed. Text-book to be used in 1915-1916: Franklin, Crawford and McNutt's Practical Physics. (2 *exercises of* 2 *hours each per week.*)

PHYSICS III.—General electricity and magnetism, being a continuation of Physics 1. Text-book to be used in 1915-1916: Franklin and McNutt's Elementary Electricity and Magnetism. (2 *recitations and* 1 *laboratory exercise of* 2 *hours per week.*)

ADVANCED COURSES IN PHYSICS.—Preparation has been made for offering advanced courses in physics, as electives for Juniors, Seniors and Graduate Students. Six such courses have been planned, as follows: Advanced Experimental Physics, General Mathematical Physics, Mechanics and Acoustics, Heat, Optics, Theoretical Electricity. Each of these courses is arranged to extend through two semesters and to require three hours per week of classroom work, or equivalent time in the laboratory. Any one of these courses will be given when elected by three or more students.

SOCIOLOGY AND POLITICAL SCIENCE

Professor Bernard

SOCIOLOGY

SOCIOLOGY I.—*Principles of Sociology.*—The evolution of social institutions, with particular reference to the family; selected social problems, such as population, race, immigration, poverty, crime, the church, education and social reform. (3 *hours.*)

SOCIOLOGY II*a.*—*Modern Philanthropy.*—Causes and conditions of poverty and pauperism, preventive measures, relief, administration. (*First semester;* 3 *hours.*)

SOCIOLOGY II*b.*—*Criminology.*—Causes, prevention and treatment of crime and criminals, with particular reference to Southern conditions. (*Second semester;* 3 *hours.*)

SOCIOLOGY III*a.*—*Rural Sociology.*—Rural life in relation to sanitation, the school, the church, and various other co-operative enterprises. (*First semester;* 3 *hours.*)

SOCIOLOGY III*b*.—*Rural Economy and Organization.*—Agricultural production, marketing, cooperation, credits. (Second semester; 3 hours.)

SOCIOLOGY IV*a*.—*Southern Race Problems.*—A study of the Negro Problem in its anthropological, social, political and economic aspects. (*Second semester; 3 hours.*)

SOCIOLOGY V*a* or *b*.—*Current Public Problems.*—(*Either semester; 1 hour.*)

SOCIOLOGY VI*a* or *b*.—*Industrial Sociology.*—The social foundations of modern industry; improvement of the conditions of industry; the workers, their conditions, demands and needs; social control of the industrial system. (*Either semester; 3 hours.*)

SOCIOLOGY VII.—*Seminar.*—Special problems for advanced students. (*Hours to be arranged.*)

POLITICAL SCIENCE

POLITICAL SCIENCE I.—*American Government.*—Federal, State, and local governments, with particular reference to the actual practice of legislation, administration and the courts. Current political problems. (3 *hours.*)

POLITICAL SCIENCE II*a*.—*Principles of Political Science.*—(*First semester; 3 hours.*)

POLITICAL SCIENCE II*b*.—*European Governments.*—(*Second semester; 3 hours.*)

POLITICAL SCIENCE III*a* or *b*.—*City Government and Administration.*—Political control of American cities; European methods compared; efficiency of administration; the newer tendencies. (*Either semester; 3 hours.*)

POLITICAL SCIENCE IV*a* or *b*.—*The Public Service.*—The civil service and governmental service in general. A general non-technical course for those who have had the first course in economics, political science and sociology. Special lectures by men engaged in public service will be given from time to time. (*Either semester; 3 hours.*)

POLITICAL SCIENCE V*a* or *b*.—*Public International Law and Diplomacy.*—International conventions and customs; arbitration; organization and methods of diplomacy. (*Either semester; 3 hours.*)

COLLEGE OF AGRICULTURE

J. J. VERNON, *Dean*

FACULTY.—J. J. Vernon, O. C. Ault, L. L. Bernard, L. W. Buchholz, H. W. Cox, H. S. Davis, J. M. Farr, E. R. Flint, W. L. Floyd, H. G. Keppel, M. B. Hadley, R. J. McPherson, C. K. McQuarrie, N. L. T. Nelson, E. S. Pace, F. M. Rast, Jr., A. P. Spencer, J. A. Thackston, E. S. Walker, C. L. Willoughby.

Special Lecturers for 1915-1916

Hon. W. A. McRae, *Commissioner of Agriculture.*

Prof. H. Harold Hume, *President State Horticultural Society.*

Hon. C. F. Barber, *President State Live Stock Association.*

Dr. Chas. F. Dawson, *Veterinarian, State Board of Health.*

Dr. E. H. Sellards, *State Geologist.*

Capt. R. E. Rose, *State Chemist.*

Dr. E. W. Berger, *State Nursery Stock Inspector.*

Dr. Geo. F. Babb, *Field Agent, U. S. D. A., Bureau of Animal Industry.*

GENERAL STATEMENT

AIM AND SCOPE.—The College of Agriculture is intended to meet the requirements of the Acts of Congress creating and endowing colleges in the different States. From these Acts it is apparent that recognition of agriculture as a branch of collegiate instruction is a distinctive feature of the institutions thus founded. The aim of the College is to offer young men the best possible preparation for agricultural pursuits. The courses afford opportunity for gaining both technical knowledge and training in the art of agriculture. Since about one-third of the student's time is devoted to agricultural branches and the other two-thirds to the basic sciences and cultural studies, a broad foundation is laid which will enable him, upon graduation, to become either a leader in educational work or an effective producing agriculturist.

GROUPS.—The group courses offered during the Sophomore, Junior and Senior years afford opportunity for selecting and preparing for the phase of agriculture best suited to the qualifications and taste of the individual students. The Agronomy or Animal Husbandry Group should be elected by those wishing to pursue general farming; the Horticultural Group by

those interested in fruit production or market gardening; the Chemical Group by those wishing to become agricultural analysts. In order to meet the constantly increasing demand for men competent to give instruction in agriculture, a special group has been prepared for teachers.

The General Group will appeal to students seeking a knowledge of the principal subjects embraced in all the branches of agriculture, and will specially train men for service as County Agricultural Experts and Farm Demonstration Agents, the demands for whom will be greatly increased because of the appropriations recently made by Congress under the Smith-Lever Act.

Great care should be exercised by students in the selection of a group course, for the selection should be such as to fit them best for their life work.

SCHOLARSHIPS.—The following scholarships in agriculture were available during 1914-1915:

Southern Railway Scholarship—William Wilson Finley Foundation, $200.

Corn Club Scholarships—The Independent Fertilizer Co., Jacksonville, Florida, one; DeSoto County, one; Hamilton county, one; and Hillsboro County, four scholarships. These paid about $12.00 each, covering the expenses for the Ten-Day Short Course, and were available for members of the Boys' Corn Clubs.

AGRICULTURAL CLUB.—Membership is strongly urged upon all students of the College. The purpose of the Agricultural Club is to promote interest in agriculture, to unify College thought, to afford training in public speaking and to prepare for leadership in after life.

EQUIPMENT.—*Agricultural Hall.*—Agricultural Hall (see page 18) provides space for department offices; for classrooms in Agronomy, Animal Husbandry and Agricultural Engineering; for laboratories in soils and fertilizers, crops and grain judging, farm machinery, farm power, milk testing, dairy manufactures, etc.

The classrooms and laboratories were planned to meet the needs of the instruction to be given, and a large amount of apparatus has been added that materially strengthens the work of the College.

Library.—The Agricultural Library is small but well selected, and is added to every year. The leading technical books and a fairly complete set of State Experiment Station and Government Bulletins are placed within easy reach of the students. The general library is also open to the students of the College.

The College Farm.—The farm connected with the College of Agriculture, used for instruction purposes and for growing crops with which to feed the instruction herds, consists of 135 acres; about 20 acres for trucking, 95 acres for pasture and general field crops, 10 acres for orchard, 7 acres for soiling purposes and stock lots and 3 acres for buildings and grounds. The equipment includes a hay and storage barn, a farm foreman's house, a modern dairy barn, a machinery shed and corn crib, a potting house and an irrigation system.

AGRONOMY DEPARTMENT

The *Agronomy Department* occupies four rooms—a large, well lighted, well equipped soil laboratory, with an adjoining storage and work room, and a large crop judging laboratory, with an adjoining mouse-proof storage room for seed and forage crops.

The soil laboratory equipment comprises microscopes, sampling augers, tubes and carriers; balances, ovens, soil thermometers, packers, cylinders and tubes; moisture absorption box with trays; percolation, capillary and evaporation apparatus; sieves, shaker, etc. The equipment is of the best type and fully adequate for giving thorough courses in soils. There are three large stone-top desks with individual lockers for seventy-two students. The storage room is provided with soil bins, packer, cases and shelving in abundance.

The field crop laboratory is provided with five long judging tables and the storage room for seed and forage is lined with suitable shelving.

For *Agricultural Engineering* work, which for the present is connected with the Agronomy Department, there are two specially equipped laboratories—the one for farm motors and iron work, the other for farm machinery and wood work.

These laboratories are equipped with a large collection of modern labor-saving machinery, consisting of gasoline engines, windmills, feed grinders, stalk cutter, walking and riding plows, various types of harrows, walking and riding culti-

vators, seeders, one and two-horse corn planters, manure spreader, etc. Special stress is placed upon instruction in farm machinery, because labor-saving machinery has not yet come into general use upon Florida farms.

DONATIONS AND LOANS.—The laboratories have been supplied with much of this labor-saving farm machinery for the purpose of instruction through the generosity of the following manufacturers:

The John Deere Plow Company, Atlanta, Ga.

International Harvester Company, Chicago, Ill., and Jacksonville, Fla.

Stover Manufacturing Company, Freeport, Ill.

Perkins Windmill Company, Mishawaka, Ind.

Through an agreement to carry out demonstration tests on the College farm, the J. I. Case Plow Works, Racine, Wis., has provided the farm laboratory with a complete equipment of up-to-date crop growing machinery.

ANIMAL HUSBANDRY DEPARTMENT

The *Animal Husbandry Department* is provided with a large lecture and exhibit room containing tiered seats for sixty students and a paddock, 12x24 feet in size, with concrete floor and iron railing, for exhibiting animals. The equipment includes a two-ton Fairbanks platform scale, tape lines, measuring standards and projectors. In the new dairy barn a stock judging arena 30x40 feet has been provided for practice in scoring animals.

A basement room in Science Hall is being fitted for practice in butchering and curing meats, in order to familiarize students with the cuts of the animal carcass and the best methods of saving meat.

The equipment in *Veterinary Science* consists of excellent mounted skeletons of the horse and cow, several wall charts on anatomy and physiology, a set of veterinary operating instruments and sample jars of common drugs and medicines.

For *Dairy Work,* which for the present is connected with the Animal Husbandry Department, the College has a large, well lighted laboratory. The equipment includes several makes of hand power cream separators, several patterns of swing and barrel churns, four styles of lever and hand power butter workers, two combined churn and butter workers, butter packers, shipping cases, etc.; a large Cooley creamer, starter

and mixing cans, vats for cream ripening and cheese making; a milk cooler, Pasteurizer, bottling machine, storage refrigerator, creamery scales, wash sinks, sterilizer chest and the necessary cans, buckets, bottles and brushes.

The milk testing laboratory contains working desks and machinery for all the modern tests of dairy products. The equipment includes Babcock testers of different sizes, cream scales, lactometers, acidmeters, butter moisture tests and the necessary glassware, reagents, etc.

The equipment in *Live Stock* is fairly well begun, and the individuals on hand are of a high grade. A special fund provided by the Legislature is being used to buy additional cattle, sheep and swine. The herds now include Jersey and Shorthorn cattle, Tamworth and Duroc Jersey swine; and will be increased from year to year, by breeding and as additional funds are secured, until representatives of all the important breeds and classes of farm animals are available for use in the study of breeds of live stock and score card judging.

The Legislature of 1913 provided funds for a sanitary *Dairy Barn* with modern equipment. This will house the dairy herds of both the Experiment Station and the College of Agriculture and will form a splendid object lesson in daily operation for observation and practice in sanitary milk production.

Through the aid of the State Board of Health, one of the best concrete cattle *Dipping Vats* in the State has been constructed for the use of the College and the public, and progress is being made in tick eradication work.

A number of *Feeding Pens* and *Grazing Yards* have been provided for hogs, with portable shelters and modern equipment suitable to Southern conditions. The equipment for teaching poultry culture includes colony houses, Cyphers incubator, brooders and small apparatus. Poultry breeders of the County and State aid the work by lending prize winning fowls for judging purposes.

HORTICULTURAL DEPARTMENT

The Horticultural Department occupies for the present quarters in Science Hall. Laboratories where various kinds of indoor work may be done are here provided. The propagation work is done in a propagating house and nursery, where stratification, layerage, cuttage, budding, grafting and other

operations with plants are carried on. Trees of different ages and varieties are growing in the orchard and the number of these will be increased as the work develops. Cold frames and covers for starting young plants and for growing certain tender vegetables to maturity in winter are used in trucking. An irrigating plant has recently been installed in the trucking area. It includes Skinner, Campbell and Florida Favorite overhead sprinkling devices, a modified Skinner system and a surface furrow system.

COURSES OFFERED

The following courses are offered:

1. A Four-Year Course.
2. A Middle Course of Two Years.
3. A One-Year Course.
4. Two Four-Month Courses.
5. A Ten-Day Short Course for Farmers.
6. Fourteen Correspondence Courses for Home Study.

FOUR-YEAR COURSE

ENTRANCE REQUIREMENTS.—For a detailed description of the requirements for admission see pages 36 to 44, inclusive.

While one unit of agriculture is required, owing to the fact that this subject has been so recently included in the curriculum of the public high schools, candidates will be allowed to take during the Freshman year the agricultural work in which they are deficient.

DEGREES.—The Four-Year Course culminating in one of the six groups—General Agriculture, Agronomy, Horticulture, Animal Husbandry, Agricultural-Chemical or Agricultural Education,—leads to the degree of Bachelor of Science in Agriculture (B. S. A.). One year of additional work leads to the degree of Master of Science in Agriculture (M. S. A.).

CREDITS FOR PRACTICAL WORK.—Students who, by previous agreement with the head of a department and the Dean, do practical work, during their course of study, in any recognized agricultural pursuit, and who render competent and faithful service, will, on their return to College and on the presentation of a concise written report or resume' of their observations and experience, be entitled to one semester-hour credit for each month of such work. Such credit shall not total more than six semester-hours in the Two-Year and Four-Year

courses. Students must have at least three months of practical work before graduation, but credit will be given for such work only as stated above.

REMUNERATIVE AND INSTRUCTIVE LABOR.—Students are offered opportunity to do considerable work in the fields and truck gardens, about the barns, in the buildings and in the Agricultural Experiment Station. The compensation usually ranges from ten to twenty cents per hour, according to the experience of the student and the nature of the work. Some students also strengthen their education by the practical knowledge thus gained. Those who during vacation periods find employment on farms or in other agricultural pursuits will be markedly benefited and after graduation will be able to command more desirable and remunerative positions, or will find their efforts on the farm more effective. In this connection emphasis should be placed upon a thorough understanding of the practical application of scientific principles.

See also page 34, Opportunities for Earning Expenses.

LABORATORY WORK.—Two hours of laboratory work are considered equivalent to one hour of recitation.

ELECTIVES.—The elective hours in each of the groups printed below may be chosen from other groups or from other colleges of the University; but the choice is, in every case, subject to the approval of the Dean.

CURRICULUM

Leading to the Degree of Bachelor of Science in Agriculture

FOR ALL GROUPS

Freshman Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Agronomy I	Soil Physics	2	2
Horticulture I	Plant Propagation	2	0
Horticulture II	Greenhouse Management	0	2
Animal Husbandry I	Types and Breeds of Animals	2	2
Agricultural Engineering I	Farm Machinery and Farm Motors	2	2
Botany I	General Botany	3	3
English I	Advanced College Rhetoric	3	3
Mathematics B	Plane Trigonometry	2	2
Agricultural Seminar		1	0
Library Work		0	1
Military Science I	Drill and Firing Regulations	1	1
		18	18

*The first column gives the hours per week for the first semester, the second column the hours per week for the second semester.

FOR ALL GROUPS EXCEPT ANIMAL HUSBANDRY

Sophomore Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Agronomy II	Fertilizers	0	3
Horticulture III	Trucking	2	2
Chemistry I-II	General Inorganic Chemistry	5	5
Botany II	Plant Physiology	3	0
Zoology I	General Zoology	3	0
Zoology III	Entomology	0	3
Military Science II	Field Regulations and Guard Duty	1	1
Elective		2	2
		16	16

GENERAL GROUP

Junior Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Chemistry III	Qualitative Analysis	3	0
Chemistry VII	Quantitative Analysis	0	3
Botany IV	Plant Pathology	3	0
Bacteriology I	General Bacteriology	3	0
Bacteriology II	Agricultural Bacteriology	0	3
Agronomy V	Rural Law and Farm Accounts	0	3
Elective		7	7
		16	16

Senior Year

Chemistry IX	Chemistry of Soils, Fertilizers, etc.	3	0
Sociology III*a* and Sociology III*b* or Economics I	Rural Sociology and Rural Economy and Organization or Principles of Economics	3	3
Agricultural Education I	Methods of Teaching Agriculture	1	0
Agricultural Education II	Extension Teaching	0	2
Agronomy VI	Farm Management	0	2
Elective		9	9
		16	16

AGRONOMY GROUP

Junior Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Agronomy III	Field Crops	3	0
Agronomy IV	Forage Crops and Grasses	0	3
Agronomy V	Rural Law and Farm Accounts	0	3
Chemistry III*a*	Qualitative Analysis	3	0
Chemistry VII*b*	Quantitative Analysis	0	3
Botany IV	Plant Pathology	3	0
Bacteriology I	General Bacteriology	3	0
Bacteriology II	Agricultural Bacteriology	0	3
Elective		4	4
		16	16

*The first column gives the hours per week for the first semester, the second column the hours per week for the second semester.

Senior Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Agronomy VI	Farm Management	0	2
Horticulture X	Landscape Gardening	0	2
Agricultural Engineering II	Buildings, Roads, Irrigation and Drainage	3	0
Chemistry IX	Chemistry of Soils, Fertilizers, etc.	3	0
Sociology III*a* and Sociology III*b* or Economics I	Rural Sociology / Rural Economy and Organization / Principles of Economics	3	3
Agricultural Education II	Extension Teaching	0	2
Elective		7	7
		16	16

HORTICULTURAL GROUP

Junior Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Horticulture IV	Citrus Culture	3	0
Horticulture V	Citrus Harvesting, Marketing and Judging	0	2
Horticulture VII	Deciduous and Subtropical Fruits	3	0
Horticulture VIII	Plant Breeding	0	3
Agronomy V	Rural Law and Farm Accounts	0	3
Botany IV	Plant Pathology	3	0
Bacteriology I	General Bacteriology	3	0
Bacteriology II	Agricultural Bacteriology	0	3
Elective		4	5
		16	16

Senior Year

Horticulture IX	Landscape Gardening	0	2
Horticulture VI or Horticulture X	Insects and Diseases of Citrus Fruits / General Forestry	3	0
Agronomy VI	Farm Management	0	2
Agricultural Engineering II	Buildings, Roads, Irrigation and Drainage	3	0
Agricultural Education II	Extension Teaching	0	2
Chemistry IX	Chemistry of Soils, Fertilizers, etc.	3	0
Sociology III*a* and Sociology III*b* or Economics I	Rural Sociology / Rural Economy and Organization / Principles of Economics	3	3
Elective		4	7
		16	16

*The first column gives the hours per week for the first semester, the second column the hours per week for the second semester.

ANIMAL HUSBANDRY GROUP

Sophomore Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Animal Husbandry II	Animal Feeding	3	0
Animal Husbandry III	Animal Breeding	0	3
Dairying I	Dairy Testing	2	0
Dairying II	Farm Buttermaking	0	2
Chemistry I-II	General Inorganic Chemistry	5	5
Zoology I	General Zoology	3	3
Military Science II	Field Regulations and Guard Duty	1	1
Elective		2	2
		16	16

Junior Year

Animal Husbandry IV	Beef Production	2	0
Animal Husbandry V	Swine Production	0	2
Animal Husbandry VI	Poultry Culture	0	3
Dairying III	Dairy Farming	3	0
Agronomy III	Field Crops	3	0
Agronomy IV	Forage Crops and Grasses	0	3
Bacteriology I	General Bacteriology	3	0
Bacteriology II	Agricultural Bacteriology	0	3
Elective		5	5
		16	16

Senior Year

Animal Husbandry VII	Animal Hygiene	3	0
Animal Husbandry VIII	Animal Diseases	0	3
Animal Husbandry IX	Seminar	2	0
Agronomy VI	Farm Management	0	2
Agricultural Engineering II	Buildings, Roads, Irrigation and Drainage	3	0
Agricultural Education II	Extension Teaching	0	2
Sociology III*a* and Sociology III*b* or Economics I	Rural Sociology; Rural Economy and Organization; Principles of Economics	3	3
Elective		5	6
		16	16

*The first column gives the hours per week for the first semester, the second column the hours per week for the second semester.

AGRICULTURAL-CHEMICAL GROUP

Junior Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Chemistry IV	Qualitative Analysis	5	5
Chemistry V	Organic Chemistry	3	3
Bacteriology I	General Bacteriology	3	0
Bacteriology II	Agricultural Bacteriology	0	3
Elective		5	5
		16	16

Senior Year

Chemistry VIII	Quantitative Analysis	7	7
Chemistry IX	Chemistry of Soils, Fertilizers, etc.	3	0
Sociology III*a* and Sociology III*b* or Economics I	Rural Sociology and Rural Economy and Organization or Principles of Economics	3	3
Elective		3	6
		16	16

AGRICULTURAL EDUCATION GROUP

Junior Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Bacteriology I	General Bacteriology	3	0
Bacteriology II	Agricultural Bacteriology	0	3
Teachers College		6	6
Elective		7	7
		16	16

Senior Year

Agricultural Education I	Methods of Teaching Agriculture	1	0
Agricultural Education II	Extension Teaching	0	2
Sociology III*a* and Sociology III*b* or Economics I	Rural Sociology and Rural Economy and Organization or Principles of Economics	3	3
Agronomy VI	Farm Management	0	2
Teachers College		7½	7½
Elective		4½	4½
		16	16

*The first column gives the hours per week for the first semester, the second column the hours per week for the second semester.

DEPARTMENTS OF INSTRUCTION

AGRONOMY AND AGRICULTURAL ENGINEERING

Professor Vernon
Mr. Rast
Mr. McPherson

AGRONOMY

Agronomy is the science and art of crop production. It includes—Soils: Classification, fertility, cultivation and improvement; Crops: Classification, production and improvement; and Management: The application of economic business methods to farm practices.

The laboratory work and field observations aim to fix the principles learned in the classroom and to give them practical application.

AGRONOMY A*a*.—*Elements of Agronomy.*—A study of soils and soil fertility in their relations to plant growth and the underlying principles governing the production of field and forage crops. (*Short courses and Eleventh Grade, Practice High School, Teachers College;* 3 *hours.*)

AGRONOMY I.—*Soil Physics.*—The origin, formation, classification, moisture, ventilation, temperature of soils; general methods of soil management and amelioration, etc. (*Freshman year;* 2 *hours.*)

AGRONOMY II*b*.—*Fertilizers.*—The nature of plant food and its relation to the composition of soils, sources and composition of commercial fertilizers and principles governing their application, the making and economical use of farm manures, fertilizer requirements of various crops and other related topics. (*Sophomore year;* 3 *hours.*)

AGRONOMY III*a*.—*Field Crops.*—The various grain, fiber and sugar crops will be discussed with respect to their habits of growth, soil adaptations, fertilizer requirements, general methods of tillage and harvesting and the most profitable

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The letter *a* after a numeral indicates that the course is given during the first semester; the letter *b* during the second semester. Where neither *a* nor *b* appears, the course, unless otherwise explained, continues throughout the year.

forms in which to market them. Special attention will be given to corn, cotton and sugar cane. (*Junior year; class* 2 *hours, laboratory* 2 *hours; credit* 3 *hours.*)

AGRONOMY IV*b.*—*Forage Crops and Grasses.*—A study will be made of forage crops and grasses, including an investigation into their adaptability to the various Florida soils, seeding and cultural methods, harvesting and storing, composition and use, illustrated by specimens brought before the students and by field observations. This course includes one hour of work in the botany of grasses, given by the botanist. (*Junior year;* 3 *hours.*)

AGRONOMY V*b.*—*Rural Law and Farm Accounts.*—Classification of property, boundaries, fences, stock laws, rents, contracts, deeds, mortgages, taxes, laws governing shipping and other topics of special interest to farmers will be treated; and a system of farm bookkeeping will be worked out, using the transactions of the College farm as a basis for material for instruction. (*Junior year;* 3 *hours.*)

AGRONOMY VI*b.*—*Farm Management.*—A study of the principles underlying farm management; specialized and general farming; problems of labor, machinery, storing, marketing; laying out farms, systems of rotation, etc. (*Senior year;* 2 *hours.*)

AGRONOMY VII*b.*—*Weeds.*—Origin and distribution; collecting and identifying; injury to crops and methods of eradication. (*Elective, Junior or Senior year;* 2 *hours.*)

AGRONOMY VIII*b.*—*Soil Fertility.*—A study of the principles of soil fertility, including the relations that exist between the plant and plant food, water, climate, texture, humus and tillage. (*Elective, Junior or Senior year;* 3 *hours.*)

AGRONOMY IX*a* or *b.*—*Special Courses.*—Special courses will be offered at the option of the instructors, on approval of the Dean.

AGRICULTURAL ENGINEERING

AGRICULTURAL ENGINEERING A*b.*—*Elements of Agricultural Engineering.*—A study of farm machinery and farm motors, irrigation, drainage, buildings, sanitation, roads, fences, etc., elements essential to profitable plant and animal production and the making and maintenance of comfortable, healthful homes. (*Twelfth grade, Practice High School, Teachers College;* 3 *hours.*)

AGRICULTURAL ENGINEERING I.—*Farm Machinery.*—The course includes a study of the history of the development, details of construction, functions, methods of operation and care of the various forms of tillage, seeding and harvesting machinery. Special attention is given to plows, harrows, seeders and drills, corn and Irish potato planters, cultivators and weeders, mowers and rakes, potato diggers, spraying machines and vehicles.

Farm Motors.—A study of farm power, water power, horse power, windmills; water, air and oil cooled internal-combustion engines—stationary, portable and traction—using gas, gasoline, naphtha, kerosene or crude oil as fuel; steam engines—stationary and traction, in their relation and application to farm work. (*Freshman year; class* 1 *hour, laboratory* 2 *hours; credit* 2 *hours.*)

AGRICULTURAL ENGINEERING II*a.*—*Buildings, Roads, Irrigation and Drainage.*—Such topics as the construction of farm residences, barns and other farm buildings; the laying out of roads and fields; underdrainage; and irrigation plants will be considered, and the students will be given practice in drawing plans and writing specifications. (*Senior year;* 3 *hours.*)

AGRICULTURAL EDUCATION

Professor Vernon
Professor McQuarrie
Professor Spencer
Professor Pace

AGRICULTURAL EDUCATION I*a.*—*Methods of Teaching Agriculture.*—A course of lectures in methods of presenting agricultural subjects. It will include materials and laboratory usage. (*Senior year;* 1 *hour.*)

AGRICULTURAL EDUCATION II*b.*—*Extension Teaching.*—A course of lectures covering the history, methods, purposes and results of extension teaching. (*Senior year;* 2 *hours.*)

AGRICULTURAL SEMINAR.—Subjects will be arranged on the approval of the Dean. (*Freshman year; first semester;* 1 *hour.*)

HORTICULTURE

Professor Floyd

Horticulture is applied to the cultivation of useful and ornamental garden plants and orchard fruits. These are the plants most intimately associated with the private life of the

home. In a subtropical climate unusual opportunities for practical and interesting study are presented. The wonderful variety of plants, the peculiar problems involved in their growth and development and the accomplishments of those who have given time and labor to the solution of those problems, offer inviting fields for study and experimentation. Both the practical and the aesthetic tendencies may be cultivated.

The department with its orchard, garden, laboratory and library offers fine opportunity for instruction, experiment and research.

HORTICULTURE A*b*.—*Elements of Horticulture.*—A study of varieties and culture requirements of our principal fruits and vegetables; location of orchards and gardens with reference to soils, climate and markets; protection from insects and diseases; harvesting and marketing; styles of decorative planting adapted to home and school. (*Eleventh Grade, Practice High School, Teachers College; 3 hours.*)

HORTICULTURE I*a*.—*Plant Propagation.*—Study and practice in propagation by means of division, cutting, layering, budding and grafting; seed selection, storing and testing; and the fundamental physiological processes. (*Freshman year; 2 hours.*)

HORTICULTURE II*b*.—*Greenhouse Management.*—This includes the construction, heating, planting and care of greenhouses, veranda greenhouses, the growing of ornamentals and forcing of vegetables. (*Freshman year; 2 hours.*)

HORTICULTURE III.—*Trucking.*—This course includes a study of the vegetables adapted to Florida, the seasons in which they are grown, cultural methods, fertilizing, irrigating, packing and marketing. (*Sophomore year; 2 hours.*)

HORTICULTURE IV*a*.—*Citrus Culture.*—This embraces a study of suitable soils for citrus groves, their preparation, planting, cultivation, fertilization, selection of varieties and the use of cover crops. (*Junior year; 3 hours.*)

HORTICULTURE V*b*.—*Citrus Harvesting, Marketing and Judging.*—This includes methods of picking, handling, washing, drying, packing and shipping citrus fruits. Attention will also be given to identifying the leading commercial varieties and judging by the use of the score card. (*Junior year; 2 hours.*)

HORTICULTURE VI*a*.—*Insects and Diseases of Citrus Fruits.*—A study of the injurious insects and of important

physiological and fungus diseases and their treatment. (*Prerequisite or required with this course, Hort.* IV*a; Senior year;* 3 *hours.*)

HORTICULTURE VII*a.*—*Deciduous and Subtropical Fruits.* —A study of the growing of peaches, pears, persimmons, grapes, pecans, guavas, avocados, mangoes, etc. The varieties adapted to the State, their planting, cultivation, diseases and insect enemies. (*Junior year;* 3 *hours.*)

HORTICULTURE VIII*b.*—*Plant Breeding.*—Cross pollination and hybridization of plants, improvement by selection, breeding for special qualities, with field work and a study of the methods of successful breeders. (*Prerequisites,* I*a and Botany* I; *Junior year;* 3 *hours.*)

HORTICULTURE IX*b.*—*Landscape Gardening.*—The principles underlying the various styles of landscape gardening, plants suitable for planting, improvement of the home grounds, making more attractive school and public grounds, are some of the topics studied. (*Senior year;* 2 *hours.*)

HORTICULTURE X*a.*—*General Forestry.*—The principles of forestry, forest cropping, protecting the home wood lot, use of Florida woods, varieties of timber trees and the influences of the forests on the other industries of the State. (*Junior or Senior year;* 3 *hours.*)

HORTICULTURE XI*b.*—*Forest Mensuration.*—The determination of the age and volume of trees and stands. Estimating standing timber by use of the hypsometer, dendrometer and other forest instruments. Principles of volume and yield; tables and log rules. (*Prerequisite,* IX*a; Junior or Senior year;* 3 *hours.*)

HORTICULTURE XII*a.*—*The Evolution of Cultivated Plants.* —A study of evolution as applied to the modification of our cultivated plants, particularly the fruits. (*Prerequisite,* VIII*b; Senior year;* 2 *hours.*)

ANIMAL HUSBANDRY AND DAIRYING

Professor Willoughby

ANIMAL HUSBANDRY

Animal Husbandry includes subjects relating to the domestic animals, their history, classification and judging; breeding, selection and improvement; feeding, care and management; the production and marketing of beef, pork and other animal products; and the prevention and treatment of ordinary diseases of farm animals.

Live stock raising commands a steady income and is a most valuable aid in maintaining soil fertility. Since this industry will become an important factor in the general prosperity of the State, the instruction is being broadened and the equipment enlarged as rapidly as funds will permit. The underlying principles are applicable to all parts of America. Additional special instruction is given for Southeastern conditions.

ANIMAL HUSBANDRY A*a*.—*Elements of Animal Husbandry.*—Brief study of types and breeds of farm animals, with some judging practice; principles of breeding, feeding and management; production of meat, milk and poultry. (*Short Courses and Practice High School, Teachers College, Twelfth Grade;* 3 *hours.*)

ANIMAL HUSBANDRY I.—*Types and Breeds of Animals.*—The various types and classes of farm animals; practice in score card and comparative judging; history and utility of the leading breeds. Horses, mules and swine will be studied in the first semester; cattle, sheep and goats in the second. Animals upon the College farm will be used for judging purposes and occasional trips will be made to nearby stock farms and stables. (*Freshman year;* 2 *hours.*)

ANIMAL HUSBANDRY II*a*.—*Animal Feeding.*—The relation of plants to animal life; digestion and assimilation, the formation of animal tissues from nutrients in feeds; feed analyses, digestion coefficients and feeding standards; practice in compounding and balancing rations for various farm animals under different conditions. (*Sophomore year;* 3 *hours.*)

ANIMAL HUSBANDRY III*b*.—*Animal Breeding.*—Principles underlying the breeding of animals, including heredity, variation, environment, natural and artificial selection; application of breeding principles to the foundation and management of a breeding herd; value of pedigrees and performance records. (*Sophomore year;* 3 *hours.*)

ANIMAL HUSBANDRY IV*a*.—*Beef Production.*—Practical methods in beef production, including selection of feeders, feeding and management of beef cattle, finishing and marketing, slaughter and packing-house methods. Brief consideration of same subjects in mutton production will be included. (*Junior year;* 2 *hours.*)

ANIMAL HUSBANDRY V*b*.—*Swine Production.*—Location and equipment of a hog farm, breeds of swine suited to the South, raising young stock; growing feeds for grazing and fattening, feeding and managing the herd; marketing and slaughtering, curing meats on the farm. (*Junior year;* 2 *hours.*)

ANIMAL HUSBANDRY VI*b*.—*Poultry Culture.*—Location and construction of houses and runs; the principal breeds of poultry, with judging of best specimens obtainable; methods of breeding, incubation and brooding; egg production; feeding and marketing poultry; management of flock and treatment of diseases. (*Junior year;* 3 *hours.*)

ANIMAL HUSBANDRY VII*a*.—*Animal Hygiene.*—Elements of anatomy and physiology; care and training of young animals; prevention of disease, disinfection, sanitation. (*Senior year;* 3 *hours.*)

ANIMAL HUSBANDRY VIII*b*.—*Animal Diseases.*—Symptoms and treatment of common diseases of animals; simple surgical operations for the farm, castration, dehorning; properties and action of medicines suitable for farm use; occasional clinics as opportunity is offered. (*Senior year;* 3 *hours.*)

ANIMAL HUBANDRY IX*b*.—*Veterinary Elements.*—Brief course on hygiene and diseases of animals for students in Short Courses and Groups other than Animal Husbandry. (*Elective;* 3 *hours.*)

ANIMAL HUSBANDRY X*a*.—*Seminar.*—Special topics in animal industry, including essays and reports; preparation of articles for agricultural papers and answers to local problems; abstracting bulletins; monograph work. (*Senior year;* 2 *hours.*)

ANIMAL HUSBANDRY XI*a*.—*Animal Conformation.*—Detailed study of form, mechanism and characteristics of animal breeds and types, including measurements and relations of structure with special reference to utility. (*Elective for Juniors, Seniors and Graduates;* 2 *hours. Alternates with Course* XIII.)

ANIMAL HUSBANDRY XII*b*.—*Animal Nutrition.*—Advanced work in the principles of animal nutrition, including digestion, metabolism, calorimetry, utilization of nutrients for various purposes. (*Prerequisite,* II*a; elective for Juniors, Seniors and Graduates;* 2 *hours. Alternates with Course* XIV.)

ANIMAL HUSBANDRY XIII*a*.—*Breeding History.*—Advanced work in the history of breeds and breeders; tabulation of pedigrees; principles of thremmatology. (*Prerequisite,* III*b; elective for Juniors, Seniors and Graduates;* 2 *hours. Alternates with Course* XI.)

ANIMAL HUSBANDRY XIV*b*.—*Poultry Practice.*—Advanced study and practice in the feeding and management of poultry; principles of incubation; development of embryo and chick; brooder methods, broiler production, caponizing; advanced judging work. (*Prerequisite,* VI*b; elective for Seniors and Graduates;* 2 *hours. Alternates with Course* XII.)

DAIRYING

Dairying includes the production of milk, its composition and testing; sanitary handling and marketing; the manufacture of butter, cheese and ice cream; factory management and accounting.

DAIRYING I*a*.—*Dairy Testing.*—Secretion, composition and properties of milk; testing milk and its products by the Babcock method, lactometer and acidmeter; moisture tests for butter; scoring dairy products. (*Sophomore year;* 2 *hours.*)

DAIRYING II*b*.—*Farm Buttermaking.*—Methods of creaming, operation and care of cream separators; ripening cream and use of starters; churning, manufacturing and marketing butter. (*Sophomore year;* 2 *hours.*)

DAIRYING III*a*.—*Dairy Farming.*—Locations suitable for dairy farming; construction of sanitary barns, dairy houses, silos; selection of breeds, feeding and management of the dairy herd, testing and herd records; pastures; soiling crops and silage; marketing dairy products. (*Junior year;* 3 *hours.*)

DAIRYING IV*b*.—*Milk Inspection.*—Methods of producing sanitary milk, transportation and marketing, city milk inspection; Pasteurization and care of milk in the home; score cards for dairy and milk depots; milk and cream contests. (*Elective, Junior or Senior year;* 2 *hours.*)

DAIRYING V.—*Dairy Manufactures.*—Advanced work in making butter, cottage and Cheddar cheese, fermented milks, ice cream and various market products; creamery management and accounting. (*Prerequisites, Dairying* I*a and* II*b; elective for Juniors, Seniors and Graduates;* 2 *hours.*)

OTHER DEPARTMENTS

Descriptions of the other subjects that may be taken by students in the College of Agriculture are, in order to avoid repetition, not printed here and may be found by reference to the Index.

MIDDLE COURSE IN AGRICULTURE

For the convenience and accommodation of those who cannot meet the requirements for entrance to the Freshman year, or who may not wish to pursue the Four-Year Course and yet desire to obtain thorough training in practical and scientific agriculture, a two-year course is offered. The course is not designed to supplant or in any way to be a substitute for the college course outlined above.

ENTRANCE REQUIREMENTS.—The requirements for admission to the Middle Course are:

English	2 units
Mathematics	2 units
History	1 unit
Elective	3 units
	8 units

These requirements are equivalent to the work completed in the tenth grade or Junior high schools. Students must be at least sixteen years of age to be admitted.

TITLE.—The title of Graduate in Farming (G. F.) will be conferred upon students who satisfy the entrance requirements and complete the Middle Course in Agriculture. This title was conferred at the Commencement exercises in June, 1914, upon Frederick Hubbell Steil, of Sydney, Ohio.

CERTIFICATE.—Those who cannot satisfy these entrance requirements may be admitted to the Middle Course upon showing a good knowledge of the common school branches, and will be awarded a certificate for the work done. Such certificates were awarded at the Commencement exercises in June, 1914, upon George Darling Glegg, of Ruskin, Fla., Frederick Charles Nieland, of St. Johns Park, Fla., Bertl Jay Owen, of Jacksonville, Fla., and Quiller Clifford Webb, of Cantonment, Fla.

MIDDLE COURSE

Leading to the Title of Graduate in Farming

First Year

NAMES OF COURSES	NATURE OF WORK	HOURS PER WEEK
(*First Semester*)		
Agronomy A	Elements of Agronomy	3
Agronomy I	Soil Physics	2
Animal Husbandry A	Elements of Animal Husbandry	3
Agricultural Engineering I	Farm Machinery	2
Agricultural Seminar		1
*Military Drill		R
Elective		7
		18
(*Second Semester*)		
Agronomy I	Soil Physics	2
Horticulture A	Elements of Horticulture	3
Animal Husbandry IX	Veterinary Elements	3
Agricultural Engineering I	Farm Motors	2
Library Work		1
*Military Drill		R
Elective		7
		18

Second Year

(*First Semester*)		
Agronomy III	Field Crops	3
Horticulture I	Plant Propagation	2
Horticulture III	Trucking	2
*Military Drill		R
Elective		11
		18
(*Second Semester*)		
Agronomy II	Fertilizers	3
Agronomy V	Rural Law and Farm Accounts	3
Horticulture III	Trucking	2
*Military Drill		R
Elective		10
		18

*Attendance upon Military Drill is required.

NAMES OF COURSES	NATURE OF WORK	HOURS PER WEEK
Elective Studies:		
(First Semester)		
Horticulture IV	Citrus Culture	3
Horticulture VI	Insects and Diseases of Citrus Fruits	3
Horticulture VII	Deciduous and Subtropical Fruits	3
Horticulture IX	Forestry	3
Animal Husbandry I	Types and Breeds of Animals	2
Animal Husbandry II	Animal Feeding	3
Animal Husbandry IV	Beef Production	2
Dairying I	Dairy Testing	2
Dairying III	Dairy Farming	3
Agricultural Engineering II	Buildings, Roads, Irrigation and Drainage	3
Botany I	General Botany	3
Chemistry I-II	General Inorganic Chemistry	5
Bacteriology I	General Bacteriology	3
(Second Semester)		
Agronomy IV	Forage Crops and Grasses	2
Agronomy VI	Farm Management	2
Horticulture II	Greenhouse Management	2
Horticulture V	Citrus Harvesting and Marketing	2
Horticulture VIII	Plant Breeding	3
Horticulture X	Landscape Gardening	2
Horticulture XI	Development of American Horticulture	2
Animal Husbandry I	Types and Breeds of Animals	2
Animal Husbandry III	Animal Breeding	3
Animal Husbandry V	Swine Production	2
Animal Husbandry VI	Poultry Culture	3
Dairying II	Farm Buttermaking	2
Agricultural Education II	Extension Teaching	2
Botany I	General Botany	3
Chemistry I-II	General Inorganic Chemistry	5
Bacteriology II	Agricultural Bacteriology	3
Zoology III	Entomology	3

Note.—This course may, with the approval of the Dean and the consent of the instructors, be altered to suit the needs of the individual students. Students shall choose from the elective studies, from other courses or from the Practice High School of the Teachers College, a sufficient number to make a total of not less than sixteen nor more than eighteen hours per week, except on approval of the Dean. All choice of electives must, furthermore, be submitted to the Dean.

*Attendance upon Military Drill is required.

SHORT COURSES IN AGRICULTURE

J. J. Vernon, Director

Practically all of the agricultural colleges of the United States have found short courses necessary in order to reach a large class of young or prospective farmers. It has seemed unwise to withhold from this deserving class of wealth producers the advantages of the equipment and instruction provided by the federal and State appropriations. Men who have completed a high school course are fitted to enter the regular college course. In the Middle and Short Courses the same advantages are thrown open to those who cannot enter the Four-Year Course, and the results obtained indicate the wisdom of the step. Since the value of such courses has been satisfactorily demonstrated, the courses outlined below are offered, designed to meet the varying needs of the farmer.

CERTIFICATE.—Certificates will be granted to those who complete any of the short courses. For the completion of the One-Year Course certificates were conferred at the Commencement exercises in June, 1914, upon Frank Crowther McGarvey, of Lorain, Ohio, Edmond Raymond Moss, of Espanola, Fla., and Ross Gould Oliphant, of Manatee, Fla.

ONE-YEAR COURSE IN AGRICULTURE

This course will meet the needs of those who can spend only one year at school. The only requirement for admission is a good knowledge of the common school branches.

NAMES OF COURSES	NATURE OF WORK	HOURS PER WEEK
(*First Semester*)		
Agronomy A	Elements of Agronomy	3
Agronomy I	Soil Physics	2
Agronomy III	Field Crops	3
Horticulture I	Plant Propagation	2
Horticulture III	Trucking	2
Horticulture IV	Citrus Culture	3
Horticulture VI	Insects and Diseases of Citrus Fruits	3
Horticulture VII	Deciduous and Subtropical Fruits	3
Animal Husbandry A	Elements of Animal Husbandry	3
Animal Husbandry I	Types and Breeds of Animals	2
Animal Husbandry II	Animal Feeding	3
Animal Husbandry IV	Beef Production	2
Dairying I	Dairy Testing	2
Dairying III	Dairy Farming	3
Agricultural Engineering I	Farm Machinery	2
Agricultural Engineering II	Buildings, Roads, Irrigation and Drainage	3
Agricultural Seminar		1
*Military Drill		R

*Attendance upon Military Drill is required.

NAMES OF COURSES	NATURE OF WORK	HOURS PER WEEK
(*Second Semester*)		
Agronomy I	Soil Physics	2
Agronomy II	Fertilizers	3
Agronomy IV	Forage Crops and Grasses	3
Agronomy V	Rural Law and Farm Accounts	3
Agronomy VI	Farm Management	2
Horticulture A	Elements of Horticulture	3
Horticulture II	Greenhouse Management	2
Horticulture III	Trucking	2
Horticulture V	Citrus Harvesting, Marketing, Judging	2
Horticulture X	Landscape Gardening	2
Animal Husbandry I	Types and Breeds of Animals	2
Animal Husbandry V	Swine Production	2
Animal Husbandry VI	Poultry Culture	3
Animal Husbandry IX	Veterinary Elements	3
Dairying II	Farm Buttermaking	2
Agricultural Engineering I	Farm Motors	2
Library Work		1
*Military Drill		R

NOTE.—Students shall select not less than sixteen nor more than eighteen hours per week, except on approval of the Dean, to whom all choice of studies must be submitted.

FOUR-MONTH COURSES IN AGRICULTURE FOR FARMERS

The work of each semester of the One-Year Course outlined above has been so planned as to form of itself a well rounded course of study which can be pursued to great advantage by those who are unable to spend more than four months at the University. Each of these Four-Month Short Courses, one of which begins on September 21, 1915, and the other on January 31, 1916, should appeal to practical farmers who wish to increase their productive power, to young men who expect to become farmers and to those who are turning from other lines of work in order to possess land and obtain the advantages of country life.

Military Drill is not required of those who take only one of these courses, but is required of those who take both during the same scholastic year. Under "Types and Breeds of Animals," Horses, Mules and Swine are studied in the first semester; Cattle, Sheep and Goats in the second.

TEN-DAY SHORT COURSE IN AGRICULTURE FOR FARMERS

Beginning January 11, 1916, and ending January 21, 1916.

The Ten-Day Farmers' Short Course in Agriculture is offered to meet the needs of those who for any reason cannot pursue a longer course. It is especially suited to the following

*Attendance upon Military Drill is required.

classes: First, busy farmers of all ages who, recognizing their needs for better preparation, desire more knowledge of scientific agriculture in order to render effective the practical knowledge they have already gained; second, ambitious young men who are compelled to drop out of school and yet desire to devote a short time to special preparation for their life-work upon the farm; third, city students who desire to fit themselves for farm life; and, fourth, colonists who wish to secure special information regarding Florida conditions and methods.

The laboratory equipment, the pure bred live stock and the farm used in the regular courses will be available for instruction in the Short Courses. The Agricultural Experiment Station will afford opportunity for observation and inquiry. Special care has been taken to arrange the Farmers' Short Course so as to meet the needs and suit the conditions of the practical farmer.

There are no age limits and no educational requirements for entrance to the Farmers' Short Course.

The course will consist of lectures, laboratory work and field observation and demonstration. Trips of inspection will be made to large truck and stock farms in the vicinity of the University, and successful farmers will be called before the classes occasionally for the purpose of explaining their methods.

Subjects for the Farmers' Short Course in Agriculture will be selected each year from the following list, in accordance with the special needs of the students:

Principles of Agriculture.
Soils.
Soils Laboratory.
Fertilizers.
  a. Chemical.
  b. Experimental.
  c. Practical.
Field Crops.
  a. General.
  b. Special.
  c. Experimental.
Crop Judging.
Agricultural Engineering.
  a. Farm Machinery.
  b. Farm Motors.
  c. Buildings, Fences and Roads.
  d. Drainage and Irrigation.
Plant Propagation.
Citrus Fruits and Citrus Culture.
Trucking.
  a. Crops.
  b. Marketing.
  c. Protection.
Types and Breeds of Live Stock.
Stock Judging.
Animal Breeding.
Feeds and Feeding.
Dairying.
  a. Home Dairy.
  b. Feeding, Care and Management of the Dairy Herd.
Poultry Raising.
Injurious Insects.
Plant Diseases.
Farm Bacteriology.
Farm Chemistry.
Library Research.

EXPENSES.—The necessary expenses for the Farmers' Short Course for those who board at the University are:

Board, room, heat and light for eleven days	$ 6.00
Laundry and Incidentals (estimated)	1.00
Tuition	0.00
Total	$ 7.00

The rooms in the dormitories of the University are supplied with the necessary furniture, but each student is required to bring with him sufficient bedding for his own use.

The necessary expenses for the Farmers' Short Course for those who board and room in Gainesville are:

Board, room, etc.	$ 8.00
Laundry and incidentals (estimated)	1.00
Tuition	0.00
Total	$ 9.00

The Ten-Day Short Course in Agriculture will be open to Corn Club Boys, but all boys under sixteen years of age will be required to secure room and board in Gainesville. Through the ministers of Gainesville, accommodations have been pledged for the Corn Club Boys in the homes of church members.

CORRESPONDENCE COURSES

The Legislature of 1909 authorized instruction in agriculture in the public schools and, therefore, all who choose farming in the future will have an opportunity of gaining some training designed to fit for life upon the farm. Few who are now engaged in agricultural pursuits have had such an opportunity. Recognizing this fact, the College is striving in every way possible to carry its benefits to every section of the State. By means of correspondence courses it hopes to reach a large number who have heretofore been unable to gain both scientific knowledge and practical training.

Correspondence courses are not as effective as resident study, as they lack the personal factor of the instructor and most of the benefits of laboratory work and illustrative equipment. On the other hand, with ambitious and industrious persons, such courses develop independence of thought and effective individuality of action.

Registration for any of the courses offered may be made at any time during the year. Manuscripts are corrected only between October 1st and June 1st of each year. The work may be pursued as rapidly or as slowly as other duties per-

mit. To cover office expenses a registration fee of $1.00 will be charged for each course. The instruction in all cases will be free. Those registering for a course will be required to provide themselves with a text-book and to pay the postage on all manuscripts to and from the University.

The courses, it is hoped, will eventually cover all phases of rural activity. Only white persons will be accepted. Colored persons are referred to the Agricultural and Mechanical College for Negroes at Tallahassee.

(A) *For Teachers.*—The Correspondence Course in Agriculture for Teachers is open to any person connected with or interested in the educational work of the State. It aims to prepare for examinations in elementary agriculture for teachers' certificates and to fit teachers for giving instruction in nature study and agriculture in the public schools. The work will consist of text-book study and experimental exercises. In order to approximate classroom results, rather elaborate lists of questions, each question embodying in most cases only one idea, will be issued on every lesson. The answers to these questions will be corrected, errors fully explained and the manuscripts returned.

The course is based upon the text-book adopted by the State Superintendent of Public Instruction. Other necessary literature is furnished by the University free. An outlay of about 50 cents for equipment for experimental exercises will be necessary.

(B) *For Farmers.*—The following courses are offered for 1915-1916:

1. Elementary Agriculture.
2. Soils.
3. Tillage.
4. Drainage and Irrigation.
5. Manures and Fertilizers.
6. Field Crops (General).
7. Field Crops (Southern).
8. Types and Breeds of Live Stock.
9. Dairy Husbandry.
10. Poultry Husbandry.
11. Animal Breeding.
12. Feeds and Feeding.
13. Citrus Fruits and Citrus Culture.
14. Trucking.

Any course may be selected. It is usually best to pursue one course at a time, upon the completion of which another may be started, although a logical order should be followed. A succession of courses covering two or more years affords opportunity to acquire during leisure moments a knowledge of agricultural science. For further information, address Dean J. J. Vernon. Blanks for registration will be sent upon request.

AGRICULTURAL MEETINGS

The Dean of the College of Agriculture is authorized by the President of the University to extend a cordial invitation to all Agricultural societies or similar organizations in the State to use the College of Agriculture as the place for their meetings.

Meetings held recently at the College include:

Second Annual Convention of the Florida State Live Stock Association, December 16-18, 1913.

Third Annual Conference of the County Agents of the Farmers' Cooperative Demonstration Work, September 1 to 11, 1914.

Fifth Annual Citrus Seminar, under auspices of the Division of University Extension, September 21 to 26, 1914.

COLLEGE OF ENGINEERING

J. R. BENTON, *Dean*

FACULTY.—J. R. Benton, C. L. Crow, James M. Farr, E. R. Flint, H. G. Keppel, W. S. Perry, R. R. Sellers, A. J. Strong, R. W. Thoroughgood, E. S. Walker, A. J. Wiechardt.

GENERAL STATEMENT

AIM AND SCOPE.—It is the aim of the College of Engineering to furnish such training as will be useful to its graduates in the profession of engineering. The courses of instruction are similar to those offered in other American engineering schools of college grade; and the graduates are prepared to fill successfully such positions as are usually allotted to young engineers.

Scholastic training alone cannot make a competent engineer, any more than it can make a competent physician or lawyer. It can, however, fit a man to enter the profession of engineering; and it is an important element in ultimate success in that profession.

The work of the College of Engineering is divided among courses of study of the following types: (1) Courses in the sciences fundamental to the practice of engineering, of which mathematics, chemistry and physics are the most important; (2) courses in various branches of engineering practice in which those sciences are applied, such as structural engineering, steam and gas engineering or electrical engineering; (3) courses in practical work, such as mechanic arts, drafting or surveying; and (4) courses contributing primarily to general culture, such as those in English and in Spanish.

BUILDINGS AND EQUIPMENT.—The headquarters and principal building of the College of Engineering is Engineering Hall. It is a three-story brick building, 122 feet by 73 feet, with a one-story wing for boilers and steam engine laboratory. It provides classrooms and drafting-rooms for all of the engineering departments of instruction, and various special laboratories, such as the hydraulic laboratory, dynamo laboratory, steam engine laboratory and laboratory for testing materials.

For the shop work, a separate building is used. (See page 18.)

A part of the work of the College of Engineering coincides with that of the other colleges of the University, and for all such work the same classrooms and laboratories are utilized.

Suitable equipment is available for the courses requiring laboratory work, shop work or field work in surveying, and is described on pages 21 to 24.

ADMISSION.—To gain admission to the Freshman class of the College of Engineering, a candidate must offer 16 entrance units. Of these units, 3 must be in English, 4 in Mathematics, 1 or 2 in History, 2 or 1 in Science. The remaining 6 must be chosen from among the list of studies given on page 38, but not more than 4 can be from vocational subjects. These requirements are equivalent to the completion of the twelfth grade of the Senior high schools, and are fully explained on pages 36 to 44, inclusive.

BENTON ENGINEERING CLUB.—The two engineering societies that formerly existed in the College, the Transit Club and the Kelvin Engineering Club, were consolidated in the spring of 1914 under the name of the Benton Engineering Club. Weekly meetings of this society are held, at which each member in turn presents a paper on some topic of interest to engineering students. Membership in the society is strongly urged upon every student in the College.

EXPENSES.—See page 30.

REQUIREMENTS FOR DEGREES FOR STUDENTS ADMITTED BEFORE SESSION 1913-14.—The regulations printed below went into effect with the school year of 1913-14. Students previously admitted to the College of Engineering will be held to the requirements for degrees in force when they entered.

CURRICULA AND DEGREES.—Three curricula, each requiring four years, are offered: one in Civil Engineering, one in Electrical Engineering, and one in Mechanical Engineering. They lead to the degrees of Bachelor of Science in Civil Engineering (B. S. C. E.), Bachelor of Science in Electrical Engineering (B. S. E. E.), and Bachelor of Science in Mechanical Engineering (B. S. M. E.), respectively.

The Freshman year is the same for all engineering students; the Sophomore year is the same for electrical and mechanical engineering students. The work in chemistry,

English, Spanish, mathematics and physics is the same for all engineering students throughout the curriculum, and in part coincides with that provided for students in the College of Arts and Sciences. All engineering students take some work in drafting and shop practice, but the time devoted to these subjects varies in the different curricula.

A student who has completed the regular curriculum leading to the bachelor's degree in engineering, and has also had experience in responsible engineering practice, may obtain the degree Civil Engineer (C. E.), Electrical Engineer (E.E.), or Mechanical Engineer (M. E.), under the following regulations:

The degree C. E., E. E. or M. E. may be granted to a graduate of the College of Engineering upon recommendation of the head of the department in which the degree is sought, and with the concurrence of the Faculty of the College of Engineering, provided the candidate submits evidence that he has had from two to five years of successful and responsible engineering practice, subsequent to graduating. The length of time demanded will depend on the character of the professional experience, and on the average grade which the candidate obtained while an undergraduate, which must be 90 or more in order to obtain the degree in two years. By responsible" experience is meant work in which the candidate has to use his own initiative, as distinguished from the mere rendering of routine assistance.

It is intended that the bachelor degrees (B. S. C. E., B. S. E. E. and B. S. M. E.) shall indicate merely the completion of a course of study in the theory of engineering, while the later degrees (C. E., E. E. or M. E.) shall indicate actual and demonstrated proficiency to practice engineering in some one of its branches. Every student of engineering should look forward to obtaining one of these degrees eventually.

ENGINEERING CURRICULUM

Freshman Year

FOR ALL ENGINEERING STUDENTS

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Descriptive Geometry		2	2
Descriptive Geometry Problems		1	1
English I	Composition and Rhetoric	3	3
Mathematics I	Higher Algebra, Analytic Geometry	3	3
Mathematics II	Spherical Trigonometry, Calculus	1	1
Mechanical Drawing	Drawing and Lettering	2	2
Military Science I	Infantry Drill Regulations, Small Arms Firing Regulations	1	1
Physics I	Mechanics, Heat, Acoustics, Optics	3	3
Physics II	Laboratory Work to accompany Physics I	2	2
Wood Working	Carpentry, Wood Turning, Wood Carving, Furniture Construction	3	3
		21	21

CIVIL ENGINEERING CURRICULUM

Leading to the degree of Bachelor of Science in Civil Engineering

Sophomore Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Chemistry I	Inorganic Chemistry	3	3
Chemistry II	General Laboratory Chemistry	2	2
Mathematics III	Differential and Integral Calculus	3	3
Military Science II	Field Service Regulations, Manual of Guard Duty	1	1
Physics III	Electricity and Magnetism	3	3
Railroads I	Curves and Earthwork	0	3
Spanish I	Elementary Spanish	3	3
Surveying I	Elementary Surveying	6	0
Surveying II	Topographic and Hydrographic Surveying	0	3
		21	21

*The first column gives the hours per week for the first semester, the second column those for the second semester. In acounting hours, each actual hour of laboratory, drafting, shop, or field work is counted as one-half hour.

Junior Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Electrical Engineering Ia	Elementary General Course	3	0
Graphic Statics I	Elementary Graphics; Roofs	0	2½
Machine Drawing		1½	1½
Mathematics IV	Solid Analytic Geometry and Calculus	2	2
Mechanics I	Analytic Mechanics	4	0
Mechanism	Kinematics of Machinery	2	2
Municipal Engineering I	Roads and Pavements	2	0
Railroads II	Preliminary and Final Location	3	0
Spanish II		3	3
Strength of Materials		0	4
Surveying III	Higher Surveying	0	2½
Elective		0	3
		20½	20½

Senior Year

Contracts and Specifications		2	0
English VIII	Technical Essays	1	1
Graphic Statics II	Girders and Bridges	2½	0
Hydraulics I	Elements of Hydraulics	3	0
Hydraulics II	Applications of Hydraulics	0	3
Mechanics II	Analytic Mechanics	0	4
Municipal Engineering II	Water Supply	0	5
Municipal Engineering III	Disposal of Wastes; Concrete, Plain and Reinforced	3	0
Structural Engineering	Theory and Design of Bridges and Buildings	4½	4½
Bacteriology I or Geology	General Elementary Course	3	0
Elective		0	3
		19	20½

ELECTRICAL ENGINEERING CURRICULUM

Leading to the degree of Bachelor of Science in Electrical Engineering

Sophomore Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Chemistry I	Inorganic Chemistry	3	3
Chemistry II	General Laboratory Chemistry	2	2
Forge and Foundry Work		1½	1½
Machine Drawing		1½	1½
Mathematics III	Differential and Integral Calculus	3	3
Mechanical Technology	Lectures on Forge and Foundry Practice	½	½
Mechanism	Kinematics of Machinery	2	2
Military Science II	Field Service Regulations, Manual of Guard Duty	1	1
Physics III	Electricity and Magnetism	3	3
Spanish I	Elementary Spanish	3	3
		20½	20½

*The first column gives the hours per week for the first semester, the second column those for the second semester. In counting hours, each actual hour of laboratory, drafting, shop or field work is counted as one-half hour.

Junior Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Electrical Engineering Ia	Elementary General Course	3	0
Electrical Engineering Ib	Direct Current Machinery	0	3
Elementary Machine Design		3	3
Heat Engines		3	3
Graphic Statics I	Elementary Graphics; Roofs	0	2½
Mathematics IV	Solid Analytic Geometry and Calculus	2	2
Mechanics I	Analytic Mechanics	4	0
Pattern Making		3	0
Spanish II		3	3
Strength of Materials		0	4
		21	20½

Senior Year

Contracts and Specifications		2	0
Electrical Engineering II	Alternating Currents; Transmission; Electric Lighting	7	7
Electrical Engineering III	Telegraph and Telephone	2	2
English VIII	Technical Essays	1	1
Graphic Statics of Machinery		2	0
Hydraulics I	Elements of Hydraulics	3	0
Machine Shop		0	3
Mechanics II	Analytic Mechanics	0	4
Elective		3	3
		20	20

MECHANICAL ENGINEERING CURRICULUM

Leading to the degree of Bachelor of Science in Mechanical Engineering

Sophomore Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Chemistry I	Inorganic Chemistry	3	3
Chemistry II	General Laboratory Chemistry	2	2
Forge and Foundry Work		1½	1½
Machine Drawing		1½	1½
Mathematics III	Differential and Integral Calculus	3	3
Mechanical Technology	Lectures on Forge and Foundry Practice	½	½
Mechanism	Kinematics of Machinery	2	2
Military Science II	Field Service Regulations, Manual of Guard Duty	1	1
Physics III	Electricity and Magnetism	1	1
Spanish I	Elementary Spanish	3	3
		20½	20½

*The first column gives the hours per week for the first semester, the second column those for the second semester. In counting hours, each actual hour of laboratory, drafting, shop or field work is counted as one-half hour.

Junior Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Electrical Engineering Ia	Elementary Course	3	0
Elementary Machine Design		3	3
Graphic Statics I	Elementary Graphics; Roofs	0	2½
Heat Engines		3	3
Machine Shop I		0	3
Mathematics IV	Solid Analytic Geometry and Calculus	2	2
Mechanics I	Analytic Mechanics	4	0
Pattern Making		3	0
Spanish II		3	3
Strength of Materials		0	4
		21	20½

Senior Year

Contracts and Specifications		2	0
English VIII	Technical Essays	1	1
Gas Engines		0	3
Graphic Statics of Machinery		2	0
Hydraulics I	Elements of Hydraulics	3	0
Machine Design		3	3
Mechanics II	Analytic Mechanics	0	4
Valve Gears		1	0
**Electives		6	7
		21	21

*The first column gives the hours per week for the first semester, the second column those for the second semester. In counting hours, each actual hour of laboratory, drafting, shop or field work is counted as one-half hour.

**Subject to the approval of the Professor of Mechanical Engineering.

DEPARTMENTS OF INSTRUCTION

CIVIL ENGINEERING

Professor Thoroughgood
Major Walker
Mr. Sellers

The purpose of the department is to teach the student the theory and the application of the principles underlying Civil Engineering and thus to fit him for immediate and profitable usefulness in the field and office work of his profession.

Instruction is given by means of assigned recitations from standard text-books, combined with laboratory, field and drawing-room exercises, for the purpose of emphasizing the practical side of the subject.

For the field work in Surveying and Railroads, the department is amply supplied with the necessary equipment of levels, transits, plane tables, rods, tapes, etc.

In the library will be found files, as well as the current issues, of all the leading Civil Engineering and allied technical periodicals. The reference library in Civil Engineering has been greatly enlarged recently by the purchase of books from a fund set aside for that purpose. It now contains works of reference in every branch of the subject.

SURVEYING I.—Recitations on the use of the chain, compass and level, the determination of areas, and instrumental adjustments. Field work in chaining, leveling, compass and transit surveys, and adjustments of instruments. Drawing-room work in the plotting of field notes, lettering and map drawing. (*Recitations,* 3 *hours a week; field and drawing-room work,* 2 *periods a week, of* 3 *hours each. Prerequisite*: *Mathematics* II.)

SURVEYING II.—Recitations on the use of the stadia, plane table, sextant and tape in base line work. Field problems in the use of the stadia, plane table and sextant; a complete stadia traverse. Plotting of stadia notes. (*Recitations,* 1 *hour a week; field and drawing-room work,* 1 *period a week, of* 4 *hours. Prerequisite: Surveying* I.)

SURVEYING III.—Recitations and field work. Precision leveling, city and hydrographic surveying; determinations of meridian, latitude and time. (*Recitations,* 1 *hour a week; field*

work, 1 period a week, of 3 hours. Prerequisite: Surveying II.)

RAILROADS I.—Recitations on the simple, compound, reversed, vertical and transition curve and earthworks. Field problems in curve layout. Drafting-room work in the paper location of a railroad. (*Recitations, 2 hours a week; field and drawing-room, 1 period a week, of two hours. Prerequisite: Surveying* I.)

RAILROADS II.—Field and drawing-room work in the preliminary and final location of a railroad. Estimates of earthwork and cost; plotting of profiles. (*Field and drawing-room, 2 periods a week, of 3 hours each. Prerequisite: Railroads* I.)

GRAPHIC STATICS I.—Recitations and drawing-room exercises in the computation of forces, the plotting of diagrams in elementary graphics and roofs. (*Recitations, 1 hour a week; drafting, 1 period a week, of 3 hours. Prerequisites: Mathematics* I *and* II.)

GRAPHIC STATICS II.—Recitations and drawing-room work in the graphic analysis of girders and bridges. (*Recitations, 1 hour a week; drafting, 1 period a week, of 3 hours. Prerequisite: Graphic Statics* I.)

HYDRAULICS I.—A short general course on the principles of hydraulics with special reference to their application in engineering. The subjects considered are: Stability of dams, strength of pipes and tanks, stability of ships, flow in pipes and in open channels, impulse and resistance of fluids, measurement of pressure, velocity and discharge. (*Lectures, 2 hours a week; laboratory, 1 period a week, of 2 hours. Prerequisites: Physics* I *and* II*; Mathematics* III.)

HYDRAULICS II.—The application of the principles of Hydraulics I to the solution of such engineering problems as the improvement of rivers and harbors, construction of canals, disposal of flood waters, water-power development and drainage and irrigation. (*Lectures, 2 hours a week; laboratory, 1 period a week, of 2 hours. Prerequisite: Hydraulics* I.)

MUNICIPAL ENGINEERING I.—Recitations on the theory, design and maintenance of roads, streets and pavements. (*Recitations, 2 hours a week. Prerequisite: Railroads* II.)

MUNICIPAL ENGINEERING II.—Recitations and laboratory exercises on the theory and design of a water-supply system. Drawing-room computations and plotting for an actual system. (*Recitations, 3 hours a week; drawing-room, 1 period a week, of 2 hours. Prerequisite: Hydraulics* I.)

MUNICIPAL ENGINEERING III.—Sewerage and sewerage disposal engineering. Design of sewerage systems. Drafting-room work in the design of a system. Theory of concrete and reinforced concrete. (*Recitations, 4 hours a week; drawing-room, 2 periods a week, of 2 hours each. Prerequisite: Municipal Engineering* II.)

CONTRACTS AND SPECIFICATIONS.—A study of the contract in its relation to the engineer. Specifications. (*Recitations, 2 hours a week; first semester.*)

STRUCTURAL ENGINEERING.—Theory and computations of stresses in the various types of bridges and buildings. Theory and design of highway and railroad bridges. Theory of cantilever and continuous bridges. Drawing-room designs. (*Recitations, 3 hours a week; designing and drawing, 1 period a week, of 3 hours. Prerequisite: Mechanics* I.)

ELECTRICAL ENGINEERING

Professor Benton
Mr. Perry

Instruction in this department is planned so as to lay equal stress on classroom work, of theoretical nature, and on laboratory work, of practical nature. For the latter, a well-equipped dynamo laboratory is provided, which is fully described on page 21.

The following courses are given:

ELECTRICAL ENGINEERING I*a*.—A short elementary course in general Electrical Engineering. Text-book to be used in 1915-1916: Norris's Introduction to the Study of Electrical Engineering. (*One semester only; 2 recitations and 1 laboratory exercise of 2 hours per week.*)

ELECTRICAL ENGINEERING II.—Dynamo-electric machinery, alternating currents, electrical transmission of power and electric lighting. Text-books to be used in 1915-16: Franklin and Esty's Elements of Electrical Engineering; Franklin and Esty's Dynamo Laboratory Manual. (*Required of Seniors in the Electrical Engineering course; 4 recitations and 3 laboratory exercises of 2 hours each per week.*)

ELECTRICAL ENGINEERING III.—Telegraph and telephone engineering. (*Required of Seniors in the Electrical Engineering course; 1 recitation and 1 laboratory exercise of 2 hours per week.*)

ELECTRICAL ENGINEERING IV.—A brief laboratory course on electrical machinery. (1 *laboratory exercise of* 2 *hours per week.*)

MECHANICAL ENGINEERING, DRAWING AND MECHANIC ARTS

Professor Wiechardt
Mr. Strong

The instruction in this department follows theoretical and practical lines. In the drafting-room and various shops, the best practical methods are always kept in mind. System, accuracy and neatness are insisted upon everywhere. Engineering magazines and catalogues of the best machinery are accessible to the students, who are encouraged to read them. While acquainting the student with practical methods, the aim is to produce engineers of independent thought and original power. In every possible way the student is encouraged to think for himself—to make improvements where improvements are possible and thus to keep abreast with the progress of the times.

MECHANICAL ENGINEERING

MECHANISM.—*The Kinematics of Machinery.*—This includes an investigation of link work, construction of gears and cams, belt and pulley drive, trains of mechanism, the velocity ratio and directional relation of the moving parts of various machines, etc. The text is supplemented by drawing exercises in the construction of gear teeth, cams and motion diagrams. (*Required of all Electrical and Mechanical Engineering students; Sophomore year;* 4 *actual hours. Prerequisites*: *Descriptive Geometry Problems and Mechanical Drawing.*)

VALVE GEARS.—This course consists of the graphical study of the different types of steam engine valve gears by means of the Zeuner and other diagrams; valve setting and steam distribution obtained by the usual types. (*Required of Mechanical Engineering students; Senior year;* 2 *actual hours. Prerequisite: Heat Engines.*)

GRAPHIC STATICS OF MACHINERY.—This course includes the graphic determination of the forces actuating machinery and the mechanical efficiency of several machines and machine parts. It takes into account the effect of friction of pins, sliding pieces, screws, chains, ropes and similar pieces. (*Required*

of all Electrical and Mechanical Engineering students; Senior year; first semester; 4 actual hours. Prerequisite: Graphic Statics I.)

MECHANICS Ia.—*Analytic and Applied Mechanics.*—This comprises a study of the laws of force, friction, equilibrium of fluid pressure, inertia, centrifugal force, kinetic and potential energy, etc. Problems are also assigned, illustrating the practical application of these laws to cranes, derricks, pumps, boilers, engines, dynamos and other machinery. (*Required of all Engineering students; first semester; Junior year; 4 hours. Prerequisite: all Sophomore Mathematics.*)

STRENGTH OF MATERIALS.—This comprises an investigation of the strength of materials used in the construction of machinery and engineering structures; an analysis of the stresses in bridges, roof trusses and machinery; and a study of the mechanical properties of iron, steel, timber, cement and other materials. The text is supplemented by laboratory tests on specimens of the various materials. (*Required of all Engineering students; second semester; Junior year; 4 hours. Prerequisite: Mechanics* Ia.)

MECHANICS IIb.—*Analytic and Applied Mechanics.*—A continuation of Mechanics Ia. (*Required of all Engineering students; second semester; Senior year; 4 hours. Prerequisite: Mechanics* Ia.)

HEAT ENGINES.—This includes a study of the steam engine and the laws of thermodynamics; the indicator card; and the losses involved in the conversion of one form of energy into another. (*Required of Mechanical and Electrical Engineering students; Junior year; 3 hours. Prerequisites: all Sophomore Mathematics, Physics and Chemistry.*)

GAS ENGINES.—This includes a study of the modern internal combustion engine, gas producers and the utilization in them of liquid fuels. (*Required of Mechanical Engineering students; second semester; Senior year; 3 hours. Prerequisite: Heat Engines.*)

DESCRIPTIVE GEOMETRY.—*Projections.*—This includes methods of representing points, lines, surfaces and solids in space by their projections; their intersections with each other and the careful solution of many original problems on the drawing-board. (*Required of all Engineering students; Freshman year; 2 hours.*)

DESCRIPTIVE GEOMETRY PROBLEMS.—*A companion course to Descriptive Geometry.*—It includes free-hand drawings and a further drill in making neat, accurate drawings, mechanically. The latter deals exclusively with the solution of numerous problems of the intersection of lines, planes and solids and is taught with especial reference to developing originality in thinking and reasoning. (*Required of all Engineering students; Freshman year; 2 actual hours. Prerequisite: Descriptive Geometry.*)

MECHANICAL DRAWING.—This comprises the use of the ordinary drawing instruments, the solution of geometrical problems, perspective drawing, isometric drawing, lettering and some mechanical drawing from machine parts. (*Required of all Engineering students; Freshman year; 4 actual hours.*)

MACHINE DRAWING.—*Interpreting and Reading Drawings.*—The student is required to make true working drawings, showing all the necessary dimensions and the delineation of the parts to a proper scale. He is given a set of detailed drawings from which to make an assembly drawing, or vice versa. A number of tracings and blueprints are also required. (*Required of Electrical and Mechanical Engineering students in Sophomore year, of Civil Engineering students in Junior year; 3 actual hours.*)

ELEMENTARY MACHINE DESIGN.—This includes the design and proportioning of such machine parts as bolts, riveted joints, keys and gibs, toothed gearing, belt transmissions, shafts, journals, bearings and rod joints. (*Required of Mechanical and Electrical Engineering students; Junior year; 6 actual hours. Prerequisites: Machine Drawing and Mechanism.*)

MACHINE DESIGN.—This comprises the design of machines or parts of machines to perform certain functions. From a set of specifications and a manufacturers' catalogue, plans must be drawn up for the installation of machines. A certain amount of structural drawing, relative to power plant installations, is also taken up. (*Required of Mechanical Engineering students; Senior year; 6 actual hours. Prerequisite: Elementary Machine Design.*)

MECHANIC ARTS

WOOD WORKING.—*Carpentry and Wood Turning.*—First is given an elementary course in laying out work and in the use of the ordinary hand tools, such as saws, chisels and planes.

The student is next taught the use of the turning lathe, turning by himself a series of patterns; then he is taught the care and use of wood-working machinery, such as the rip-saw, cut-off saw, band-saw and planer. (*Required of all Engineering students; first semester; Freshman year;* 6 *actual hours.*)

CABINET WORK.—*Elementary Wood Carving and Furniture Construction.*—Herein is applied the skill, knowledge and experience obtained in the first semester's work and each student will be required to design and construct a piece of furniture, or other approved article, involving carving, turning or joinery, as a passing piece. (*Required of all Engineering students; second semester; Freshman year;* 6 *actual hours. Prerequisite: Wood Working.*)

FORGE I*a*.—Practice work is first given so as to develop proficiency in the use of the hammer. The student then makes articles of intrinsic value, such as foundry tools, hammers, cold chisels, lathe tools, turning chisels, drawknives and screw-drivers. He acquires skill in forging, welding, dressing, tempering and annealing. (*Required of Electrical and Mechanical Engineering students; first semester; Sophomore year;* 6 *actual hours. Prerequisite: Cabinet Work.*)

FOUNDRY I*b*.—Foundry practice will be given; text-book or lectures. (*Required of Electrical and Mechanical Engineering students; second semester; Sophomore year;* 3 *actual hours. Prerequisite: Forge* I*a*.)

PATTERNMAKING.—This course includes instruction in glueing up work, finishing smoothly with the necessary draft, allowing for shrinkage, and similar details of the pattern-maker's craft. It is taught by the student making small patterns and core boxes from a system of carefully arranged and progressive exercises. These will be followed by the construction of patterns for such small machines as are designed in the drafting-room for construction in the shops, at least as far as the development of the work will permit. (*Required of Mechanical and Electrical Engineering students; first semester; Junior year;* 6 *actual hours. Prerequisites: Cabinet Work, Machine Drawing and Foundry* I*b*.)

MACHINE SHOP I*b*.—The student is thoroughly drilled in the practical. Simple tasks in turning, boring, grinding, planing and milling are first given, followed by more difficult ones. (*Required of Mechanical and Electrical Engineering students;*

second semester; Junior year; 6 *actual hours. Prerequisite: Patternmaking.*)

MACHINE SHOP II.—This is a continuation of the shop work of the previous year. It consists of the more intricate and difficult tasks. All of this work is on actual machinery, or parts thereof, and is of intrinsic value. (*Required of Mechanical Engineering students; Senior year;* 6 *actual hours. Prerequisite: Machine Shop* I*b*.)

MECHANICAL TECHNOLOGY.— A course of Lectures in Mechanical Technology to accompany Forge I*a* and Foundry I*b*. (*Required of Electrical and Mechanical Engineering students; Sophomore year;* 1 *hour.*)

OTHER DEPARTMENTS

Descriptions of the other subjects that may be taken by students in the College of Engineering are, in order to avoid repetition, not printed here and may be found by reference to the Index.

SHORT COURSE IN MECHANIC ARTS

A. J. Wiechardt, Director

This course is designed for students who desire to attain proficiency in drafting, machine design and shop practice, without pursuing a regular course in engineering. It does not lead to any degree. The studies shown in the following table are required:

First Year

NAMES OF COURSES	NATURE OF WORK	*HOURS PER WEEK	
Mechanical Drawing		2	2
Machine Drawing		3	3
English I	Composition and Rhetoric	3	3
Mathematics A and B	Solid Geometry, Plane and Spherical Trigonometry	4	4
Military Science I	Infantry Drill Regulations, Small Arms Firing Regulations	1	1
Mechanic Arts	16 actual hours	8	8
		21	21

Second Year

Chemistry I	Inorganic Chemistry	3	3
Elementary Machine Design		2	2
Mechanism	Machine Design	3	3
Mathematics I	Higher Algebra, Analytic Geometry	3	3
Military Science II	Field Service Regulations, Manual of Guard Duty	1	1
Physics I	Mechanics, Heat, Acoustics, Optics	3	3
Physics II	Laboratory Work to Accompany Physics I	2	2
Mechanic Arts	12 actual hours	6	6
		23	23

*In counting hours, each actual hour of laboratory, shop or field work is counted as one-half hour. First column, number of hours in first semester; second column, number in second semester.

COLLEGE OF LAW

Thos. W. Hughes, *Dean*

FACULTY.—Thos. W. Hughes, C. W. Crandall and H. R. Trusler.

Special Lecturers for 1914-1915.

Chief Justice R. F. Taylor, *Supreme Court of Florida.*
Justice R. S. Cockrell, *Supreme Court of Florida.*
Justice W. H. Ellis, *Supreme Court of Florida.*
Justice Thos. M. Shackleford, *Supreme Court of Florida.*
Justice James B. Whitfield, *Supreme Court of Florida.*
Hon. W. B. Sheppard, *U. S. District Judge.*
Hon. J. T. Wills, *Circuit Court Judge.*
Hon. Fred C. Cubberly, *Ex-U. S. District Attorney.*
Hon. W. L. Hill, *Referee in Bankruptcy.*
Hon. Robt. E. Davis, *City Attorney, Gainesville.*
Prof. Harvey W. Cox, *University of Florida.*

GENERAL STATEMENT

AIM AND SCOPE.—In 1891, the American Bar Association declared that in its opinion it was a part of the highest duty and interest of every civilized state to make provision, when necessary, for maintaining schools of law and for the thorough legal education of all who are licensed to practice law. Recognizing the soundness of this doctrine and desiring to discharge this duty on the part of the State, the State Board of Education and the Board of Control provided for the opening of the College of Law in the University of Florida in September, 1909. The advantages to accrue to the State from having, as a part of its educational system, a thorough and systematic course of instruction in the common law, with special consideration of the peculiarities and exceptions applicable in Florida, are many and evident.

It was the purpose of the Board of Control to establish a law school which, by the quality of its work and the character of its equipment, would merit and command the confidence and support of the bench and bar of the State and would draw within its walls the young men who will constitute the future bar of Florida. That the hopes of accomplishing these results were well founded and that gratifying

progress towards these ends has been made, are shown by the number and character of those who have availed themselves of the advantages offered by the College of Law.

REQUIREMENTS FOR ADMISSION.—Graduates and matriculates of colleges and universities and applicants who have completed a high school course of four years will, upon presentation of proper credentials to that effect, be admitted to the College as candidates for a degree. Other applicants for admission as regular students will be required to pass an entrance examination. For the subjects that this examination will cover, see pages 36 to 44. No applicant under nineteen years of age will be admitted.

SPECIAL STUDENTS.—Persons over twenty-one years of age who are not able to qualify as regular students may be admitted as special students upon presenting satisfactory evidence that they have received such training as will enable them to make profitable use of the opportunities offered in the College. If the entrance conditions are removed not later than the opening of the Senior year, such students may become regular students and candidates for a degree.

ADVANCED STANDING.—Attorneys at law who have been admitted to practice in the courts of this State and who comply with the above entrance requirements will be admitted to the Senior class without examination.

No work in law done in other institutions will be accepted towards a degree, unless the applicant passes satisfactorily the examinations held in the subjects in the Junior year of this College, or unless, by special vote of the Faculty, credit is given towards Senior standing without examination. In no case will credit be given for work not done in residence at an approved law school.

EXAMINATIONS.—The last week of each semester is devoted to examinations covering the work of the semester. These examinations are in writing and are rigid and searching, but are not necessarily final.

UNIVERSITY PRACTICE COURTS.—Thoroughly organized practice courts are regular features of the course of instruction in the second year. The object of the course in the Practice Courts is to give the student practical instruction in pleading and practice at law and in equity, and experience in the preparation and trial of cases. The work is arranged as follows:

First.—Cases arising upon prepared statements of fact are assigned to the second year students, upon which they are to determine what proceedings to bring and how to bring them, issue, serve and return process, prepare the pleadings and bring the case to an issue on a question of law. The case is first heard on the sufficiency of the form and the structure of the pleadings; when these are approved the issue of law is argued and decided, the students acting as attorneys drawing the order, judgment or decree to which they deem themselves entitled.

Second.—In the second class of cases, actual controversies are arranged and assigned for trial in the Circuit Court as issues of fact. After determining what action to bring, the students assigned to the case are required to issue the proper process and prepare and file the necessary pleadings, subpoena the witnesses, select the jury, examine and cross-examine the witnesses and argue the case to the jury. Each student is required to participate in the trial of at least one common-law, one equity and one criminal case and is instructed in appellate procedure.

The work of the Practice Court in Criminal Pleading and Procedure is conducted by Dean Hughes; that in Equity Pleading and Procedure by Professor Trusler; that in Common Law Pleading and Procedure by Professor Crandall.

LIBRARY.—Law books are the working tools of the practicing lawyer. To teach the student how to use these tools, how to use digests, encyclopedias and reports, is as much the work of the law school as to teach him the general principles of the law.

The College of Law was fortunate in being able to open its doors with a good working library and now has on its shelves the following books: Three sets of the Florida Supreme Court Reports, with digest; the Session Laws of Florida from 1822 to 1913, except from 1828 to 1834; McClellan's Digest and Duval's Compilation of the Laws of Florida; Revised Statutes of 1892 and the General Statutes of 1914; the Northwestern, Southwestern, Northeastern, Southeastern, Atlantic, Pacific and Southern Reporters; the American Decisions, American Reports and American State Reports, with digests; the Lawyers' Reports Annotated, with digests; the United States Supreme Court Reports, with digests; the New

York Common Law and Chancery Reports, with digests; the New York Court of Appeals Reports, the Reports of the Supreme Courts of Michigan and Massachusetts, the New Jersey Equity Reports to the Reporters, the New Jersey Law Reports to the Reporters, the Alabama State Reports, the Illinois State Reports; the Decennial Digest, the Reprint of the English Reports, the Encyclopedia of Law and Procedure and more than two hundred of the leading text-books and books of reference.

BOOKS.—The text-books used will, in most cases, be found in the law library, but it will be necessary for students to provide themselves with books for their daily use. Nearly all of the books are standard texts and will form a nucleus of the student's future library.

MARSHALL DEBATING SOCIETY.—It is important that those who study law and intend to engage in its practice should give attention to the subject of public speaking. To suppose that excellence in public speaking and debating is a gift of nature and not the result of patient and persistent effort, is a mistake. Believing in the truth of this statement, the students in the College met early the first year and organized a society that would secure to its members practice in debating and public speaking and experience in arguing legal questions, as well as drill in parliamentary law. The society was fittingly named "The Marshall Debating Society," in honor of the memory of the distinguished Southern jurist, John Marshall. The membership and work in the society are limited to students in the College of Law, but the Faculty give all possible assistance and encouragement.

UNIVERSITY PRIVILEGES.—The advantages of the other colleges of the University are open to such students in the College of Law as desire and are able to accept them. Courses in Constitutional and Political History, International Law, Political Economy, Logic, Rhetoric and English Composition are particularly recommended to law students. No extra charge will be made for such courses, but students in the College of Law will be permitted to take them only with the consent of the Law Faculty and of the professors concerned.

PRIZES.—Through the liberality of the Blackstone Institute of Chicago a set of law books valued at $75.00 is offered to the Senior law student whose average grade for both years of the course is highest.

Through the liberality of Callaghan and Company of Chicago a copy of Cyclopedic Dictionary is offered to the Senior law student whose average grade for both years of the course is next to the highest.

DEGREE.—The degree of Bachelor of Laws (LL.B.) is conferred upon those students who satisfactorily complete the courses of study. Students admitted to advanced standing may, if they do satisfactorily the work prescribed, receive the degree after one year's residence, but in no case will the degree be granted unless the candidate is in actual residence during all of the second year.

ADMISSION TO THE BAR.—The graduates of the College are licensed by the Supreme Court, without examination, to practice in the Courts of Florida upon presenting their diplomas, duly issued by the proper authorities, and upon furnishing satisfactory evidence that they are twenty-one years of age and of good moral character.

COURSE OF INSTRUCTION

The course of instruction in the College of Law extends through two years of thirty-five weeks each, exclusive of vacations. The academic year is divided into two semesters, the first having eighteen weeks and the second seventeen.

The method of instruction combines the use of text-books, court rules, statutes and selected cases. Each case is carefully studied by the student, and in the classroom he is required to analyze it, giving in his own language a clear and concise statement of the essential facts, the issues involved in the case, the law governing it and the reasoning of the court for the conclusion reached. This practice tends to thoroughness in reading, care in reasoning and accuracy on the part of the student in the art of expression.

In connection with this case work, the student studies a well written text-book on the subject under consideration. This gives him a systematic summary of the same, more detailed information concerning the application of the law in particular instances and an outline of the exceptions to and limitations upon the general principles considered in the cases.

Particular stress is placed on the statutory modifications of the common law in Florida and the decisions of the Supreme Court of the State. This is true in every subject in the curriculum; but it is especially emphasized in Pleading, Practice

and Evidence, as the course of study is designed to instruct the student thoroughly in the peculiarities of substantive law and procedure in Florida, so that he will be able understandingly to enter upon the practice of law.

With these ends in view, the following course of study has been prepared:

FIRST YEAR

FIRST SEMESTER

CONTRACTS.—The nature of contract; offer and acceptance; form and consideration; capacity of parties; reality of consent; legality of object; operation of contract. Text-book: Clark on Contracts; the Statutes of Florida and Florida cases. (5 *hours. Dean Hughes.*)

ELEMENTARY LAW AND REAL PROPERTY.—Study of the elementary principles of the law as given in Books I, II and III of first edition of Robinson's Elementary Law and Burdick on Real Property. (3 *hours. Professor Crandall.*)

DOMESTIC RELATIONS.—This course considers thoroughly the law of husband and wife, parent and child, guardian and ward, infants, persons *non compos mentis* and aliens. Text-book: Tiffany on Persons and Domestic Relations; the Statutes of Florida. (2 *hours. Professor Crandall.*)

TORTS.—History and definitions; elements of torts; conflicting rights; mental anguish; parties to tort actions; remedies; damages; conflict of laws; method of discharge. Text-books: Burdick on Torts and Burdick's Cases on Torts. (3 *hours. Professor Trusler.*)

CRIMINAL LAW.—Nature of crime; common-law and statutory offenses; mental element in crime; insanity, intoxication, infancy, coercion, ignorance and mistake as bearing on exemption from criminal liability; necessity; justification; agency; consent; condonation; contributory acts; principals; accessories; classification and study of specific crimes; former jeopardy; state and federal jurisdiction. Text-book: Clark on Criminal Law; the Statutes of Florida and Florida cases. (2 *hours. Dean Hughes.*)

SECOND SEMESTER

SALE OF PERSONAL PROPERTY.—Sale and contract to sell; statute of frauds; illegality; conditions and warranties; delivery; acceptance and receipt; vendor's lien; stoppage in

transitu; bills of lading; remedies of seller and buyer. Text-book: Tiffany on Sales. (1 *hour. Professor Trusler.*)

TORTS.—Exhaustive study of particular torts, including false imprisonment; malicious prosecution and abuse of process; conspiracy; slander and libel; trespass; conversion; deceit; nuisance; negligence. Text-books: Burdick on Torts and Burdick's Cases on Torts. (2 *hours. Professor Trusler.*)

AGENCY.—Definitions and divisions; purposes for which the relation may be created and how; who may be principal or agent and evidence of the existence of the relation; ratification; delegation of authority by agent; termination, nature and extent, construction and execution of the authority; rights, duties and liabilities of agent, principal and third persons, the one to the other; particular classes of agents. Text-book: Mechem's Outlines of Agency; the Statutes of Florida and Florida cases. (2 *hours. Dean Hughes.*)

COMMON LAW PLEADING.—Definition and classification of actions; proceedings in an action; analysis of the declaration; Stephen's Rules of Pleading. Text-book: Andrews' Stephen's Common Law Pleading. (3 *hours. Professor Crandall.*)

EQUITY JURISPRUDENCE I.—History and Definition; jurisdiction; general maxims; equitable estates, interests and primary rights, including a study of trusts, the powers, duties and liabilities of trustees; mortgages; equitable liens; assignments. Text-book: Eaton on Equity; selected cases. (2 *hours. Professor Trusler.*)

REAL PROPERTY II.—Text-book: Burdick on Real Property; the Statutes of Florida. (2 *hours. Professor Crandall.*)

CRIMINAL PROCEDURE.—Jurisdiction and venue; arrests, searches and seizures; extradition; preliminary examination, bail and commitment; modes of accusation; the form of accusation; pleading, proof; variance; verdict and judgment; proceedings after verdict; evidence; habeas corpus. Text-book: Hughes's Criminal Procedure; the Statutes of Florida and Florida Cases. (1 *hour. Dean Hughes.*)

WILLS.—Definition, nature and kinds of wills; a devisable estate; who may make a will; error, fraud, undue influence, mistake; who may take by will; formal requisites of wills; revocation; republication, by what law wills are governed; construction and effect of wills; lapse and substitution; rights

and liabilities of devisees and legatees; descent and distribution. Text-book: Costigan's Cases; the Statutes of Florida. (2 *hours. Professor Crandall.*)

SECOND YEAR

FIRST SEMESTER

EQUITY PLEADING.—Nature and object of pleadings in equity; parties to a suit in equity; proceedings in a suit in equity; bills in equity; the disclaimer; demurrers and pleas in equity; replication and answers in an equitable suit. Text-books: Shipman's Equity Pleading, Rules of the Circuit Court in Chancery in Florida and the Statutes of Florida. (2 *hours. Professor Trusler.*)

EVIDENCE.—Rules as to admission and exclusion of evidence; judicial notice; parole evidence rule; burden of proof and the right to open and close; competency and examination of witnesses; production of documents, persons and things; direct examination, cross examination and redirect examination. Text-book: Hughes on Evidence; the Statutes of Florida and Florida cases. (3 *hours. Dean Hughes.*)

BAILMENTS AND CARRIERS.—Nature and classification of bailments; rights and liabilities of the parties; innkeepers, carriers of goods as to liability, discrimination, compensation, lien; carriers of passengers as to duty to accept, accommodation, ticket, ejection, personal injuries; actions against carriers. Text-book: Goddard's Outlines of Bailments and Carriers. (1 *hour. Professor Crandall.*)

BRIEF MAKING AND THE USE OF LAW BOOKS.—Where to find the law; how to use statutes and decisions; how to find the law; the trial brief; the brief on appeal and its preparation. Text-book: Cooley's Brief Making and the Use of Law Books. (1 *hour. Professor Crandall.*)

EQUITY JURISPRUDENCE II.—Accident, mistake and fraud; penalties and forfeitures; priorities and notice; bona fide purchasers; estoppel; election; satisfaction and performance; conversion; specific performance; injunction; reformation; cancellation; cloud on title; ancillary remedies. Text-book: Eaton on Equity; Florida cases. (2 *hours. Professor Trusler.*)

ORGANIZATION OF AND PROCEEDINGS IN THE COURTS OF FLORIDA IN CIVIL ACTIONS.—

a. *In General.*—Disqualification, resignation and removal

of judges; judge's power in vacation; judge ad litem; parties to suits at law; locality and consolidation of actions; joinder of causes of action; rule days; commencement of suits at common law; appearances, defaults and judgments upon default; pleadings at law; witnesses and evidence; jurors; judgments and executions; motions for new trial and in arrest of judgment; lis pendens; appellate proceedings at law and in probate matters; limitation of actions.

b. *Supreme Court.*—Statutory powers; members of the court; its terms, record, clerk, seal, decisions and reports.

c. *Circuit Court.*—Statutory powers and duties of judges; terms; records and dockets to be kept by the clerk; seal and records.

d. *Circuit Court in Chancery.*—Its power in vacation; locality of action; process, its service and return; bill, demurrer, plea and answer; practice and evidence; masters in chancery; decrees; rehearings and appeals; injunctions; ne exeat; divorce and alimony; partition of property; quieting titles; disability of minors and married women; liens.

e. *Statutory Jurisdiction of Circuit Court.*—Ejectment; re-establishing lost papers; adoption of children; eminent domain; court commissioners.

f. *County Court.*—Jurisdiction; terms; clerk; seal; records; appeals; rules of practice.

g. *County Judge's Court.*—General powers; bonds; clerk; seal; probate powers; as justice of the peace; forcible entry and detainer.

h. *Courts of Justices of the Peace.*—General provisions; jurisdiction; proceedings before, at and after trial; proceedings on appeal.

i. *Special Statutory Proceedings at Law.*—Attachment; garnishment; forcible entry and detainer; replevin; statutory liens; landlord and tenant.

j. *Extraordinary Legal Remedies.*—Habeas corpus; quo warranto; prohibition.

Text-books: Shipman's Common Law and Equity Pleading, General Statutes of Florida, decisions of Florida Supreme Court and the Common Law and Equity Rules of Practice of the Circuit and Supreme Courts of Florida. (2 *hours a week throughout the year. Professor Crandall.*)

THE UNIVERSITY PRACTICE COURT.—(*One hour a week throughout the year. Dean Hughes, Professor Trusler and Professor Crandall.*)

FLORIDA CONSTITUTIONAL LAW.—Declaration of rights; legislative, executive and judicial departments of government; suffrage and eligibility; census and apportionment; counties and cities; taxation and finance; homestead and exemptions; married women's property; education; public institutions; miscellaneous provisions. Text-books: The Constitution, Statutes and Judicial Decisions of Florida. (1 *hour. Professor Trusler.*)

UNITED STATES CONSTITUTIONAL LAW.—General principles; distribution of governmental powers; congress; the chief executive; the judiciary; police powers; eminent domain; checks and balances; guarantee of republican government, civil rights; political privileges; guarantees in criminal cases; impairment of contractual obligations; municipal corporations. Text-books: Cooley's Principles of Constitutional Law and Cooley's Constitutional Limitations. (2 *hours. Professor Trusler.*)

BROOM'S LEGAL MAXIMS.—A reading course running throughout the year. (*Dean Hughes.*)

SECOND SEMESTER

JURISDICTION OF THE UNITED STATES COURTS.—General rules; relation of federal to state courts; jurisdiction of the different federal courts; admiralty and bankruptcy practice; removal from state to federal courts. Text-books: Sanborn's Courts—Federal and State and the Judicial Code of the United States. (1 *hour. Professor Trusler.*)

NEGOTIABLE INSTRUMENTS.—Law merchant; definitions and general doctrines; contract of the maker, acceptor, certifier; drawer, indorser, vendor, accomodater, assurer; proceedings before and after dishonor of negotiable instruments; absolute defenses; equities; payments; conflict of laws. Text-books: Bigelow on Bills, Notes, and Cheques and the Negotiable Instrument Act of Florida. (2 *hours. Professor Crandall.*)

LEGAL ETHICS.—A consideration of the profession of the law in its relation to society, embracing the duties the lawyer owes to the commonwealth, to the court, to his professional

brethren and to his clients. Text-books: Warvelle's Legal Ethics and the Code of Ethics adopted by the American Bar Association. (1 *hour. Dean Hughes.*)

EXECUTORS AND ADMINISTRATORS.—When necessary; appointment and qualification; acceptance or renunciation; foreign and interstate administration; powers, duties and liabilities of executors and administrators; inventory; assets of estate; insolvent estates; distribution; accounting and allowances. Text-book: Croswell's Executors and Administrators; the Statutes of Florida. (2 *hours. Professor Trusler.*)

DAMAGES.—General principles; nominal, compensatory, exemplary and liquidated damages; interest; value; pleading and practice; breach of contract for sale of goods; actions against carriers; death by wrongful act; wrongs affecting real property; damages in tort action; breach of marriage promise. Text-book: Rogers' Law of Damages; Florida cases. (1 *hour. Professor Trusler.*)

PARTNERSHIP.—Definitions and classifications; what constitutes a partnership; contract of partnership; firm name and good will; capital of firm; partnership property; rights and liabilities of partners among themselves and as to third persons; actions; dissolutions; limited partnerships. Text-book: Shumaker on Partnership; the Statutes of Florida and Florida cases. (2 *hours. Dean Hughes.*)

PRIVATE CORPORATIONS.—Nature of a corporation; creation and citizenship of corporations; defectively organized corporations; promoters of corporations; powers and liabilities of corporations; corporation and the State; dissolution of corporations; membership in corporations; management of corporations; creditors, their right and remedies; foreign corporations. Text-book: Elliott on Corporations; the Statutes of Florida and Florida cases. (3 *hours. Dean Hughes.*)

TEACHERS COLLEGE AND NORMAL SCHOOL

John A. Thackston, *Dean*

FACULTY.—Jno. A. Thackston, J. N. Anderson, O. C. Ault, J. R. Benton, L. W. Buchholz, W. S. Cawthon, H. W. Cox, C. L. Crow, J. M. Farr, E. R. Flint, W. B. Hathaway, S. L. Holland, Jr., H. G. Keppel, C. A. Martini, N. L. T. Nelson, A. J. Strong, J. J. Vernon.

GENERAL STATEMENT

The Teachers College and Normal School is essentially a professional school. Its main purpose is to train young men for positions in the public school system of the State as teachers, principals, supervisors, or as county and city superintendents of public instruction. Its Review Courses are intended to prepare teachers for the examinations for County and State Certificates. For those not wishing to become teachers it offers courses giving the information about and the insight into modern educational problems that every intelligent citizen should possess.

PEABODY HALL.—Peabody Hall, the home of the College, is a magnificent building, modern in every respect both as to equipment and as to arrangement. A description of it will be found on page 19.

LIBRARY.—The pedagogical library receives many of the best educational journals and contains the standard books on educational theory, general and special methods, the history of education, psychology and philosophy. Additions to these are made every year.

PSYCHOLOGICAL LABORATORY.—The Psychological Laboratory (see page 23) affords an excellent opportunity to investigate the laws of the mind. To know these through experiment will give the teacher greater power to direct properly their development in the child.

PEABODY CLUB.—Students who intend to teach are urged to become members of the Peabody Club and to take an active part in its work. The Club meets once a week to discuss educational problems and especially those that will confront the young teacher. It also brings out the advantages of holding teachers' meetings and conferences.

ORGANIZATION.—The Teachers College and Normal School has the following divisions:

(1) Teachers College.
(2) Normal School.
(3) Practice High School.
(4) Correspondence Courses for Teachers.
(5) State High School Inspection.
(6) Teachers' Employment Bureau.
(7) University Summer School.

STATE CERTIFICATES.—Graduates of the Teachers College and of the Normal School are granted State Certificates without further examination—provided that one-fifth of their work has been devoted to professional training and provided further that during each of the last two years of their course they make a general average of eighty-five on all subjects and do not fall below sixty in any subject. These State Certificates are converted into Life Certificates in the usual way.

TEACHERS COLLEGE

ADMISSION.—The requirements for admission to the Freshman class of the Teachers College are the same as those of the College of Arts and Sciences and may be found in detail on pages 36 to 44, inclusive.

TEACHING FELLOWSHIPS.—See page 33.

DEGREES.—The Teachers College offers courses leading to the degrees of Bachelor of Arts in Education and Bachelor of Science in Education.

ELECTIVES.—In order that the graduates of the Teachers College may be well prepared to teach two or three high school subjects, much freedom in the choice of electives is permitted. It is taken for granted that the student will elect the subjects which he hopes to teach and will take advantage of his freedom of choice to become especially proficient in those elected. For a list of Elective Groups see page 49. For the A. B. degree the major elective work must be chosen in Groups II and III, or Group II or III; for the B.S. degree, from Group IV. In all years the choice of electives must be approved by the Dean and no more than the required number shall be chosen without his consent.

CURRICULUM

Leading to the Degree of Bachelor of Arts or Bachelor of Science in Education

Freshman Year

NAMES OF COURSES	NATURE OF WORK	HOURS PER WEEK
Education I*a*	Psychology	3
Education II*b*	Methods of Study	
English I	Rhetoric and Composition	3
French I or German I or Spanish I or Latin	Elementary Course Elementary Course Elementary Course	3
Mathematics History I Botany I Chemistry I Agronomy I Physics I	 Modern European General Botany General Chemistry General Agriculture General Physics	6
Foreign Language	French, German, Spanish or Latin	
Military Science I		1
		16

Sophomore Year

Education III*a*	Reviews and Methods of Teaching Arithmetic and Grammar	5
Education IV*b*	Reviews and Methods of Teaching Reading, Geography and History; School Management	
Military Science II		1
*Group II		3 or 6
*Group III		3 or 6
*Group IV		3 or 6
		15

Junior Year

Education V*a*	History of Education	3
Education VI*b*	Secondary Education	
Philosophy I*a* and *b*	General Psychology	3
Electives		9
		15

Senior Year

Education VII	Principles and Philosophy of Education	3
Education VIII*a*	Child Study	3
Education IX*b*	Practice Teaching	
Education Special	High School Teachers' Course	1
Electives		9
		16

*See page 49.

DEPARTMENTS OF INSTRUCTION

EDUCATION

Professor Thackston
Professor Cox
Professor Buchholz

EDUCATION I*a*.—*Psychology.*—An elementary course designed to set forth the main phenomena of mental life, to furnish the student with the concepts and terms which will constantly recur in his further study and to prepare candidates for the examination on psychology for the State Certificate. The text-book prescribed from time to time by the State Superintendent of Public Instruction will be used in connection with lectures and much reference work to the standard American writers. (*Required of Freshmen; first semester;* 3 *hours.*)

EDUCATION II*b*.—*General Methods.*—This has for its main purpose the application of the laws of psychology, as learned in Education I*a*, to the general methods of study and of teaching. The student will be shown the best methods of study that psychological laws indicate and he will be urged to pattern his own habits of study accordingly. The general principles and methods of teaching will be stressed. (*Required of Freshmen; second semester;* 3 *hours.*)

EDUCATION III*a*.—*Reviews and Methods of Teaching Arithmetic and Grammar.*—A thorough review of arithmetic and English grammar will be made in order to acquaint the student with the fundamental principles of the subject before the methods, which immediately follow, are given: (*Required of Sophomores; first semester;* 5 *hours.*)

EDUCATION IV*b*.—*Reviews and Methods of Teaching Reading, Geography and History; School Management.*—A thorough mastery of each subject from the teacher's point of view is made and is then immediately followed by the best methods of teaching the subjects. The course in school management is designed to give the practical and theoretical information needed by principals and county superintendents in their supervision of elementary and grammar schools. (*Required of Sophomores; second semester;* 5 *hours.*)

EDUCATION V*a*.—*History of Education.*—This course has two main purposes: First, to lead the student to appreciate

the good things in the many systems of education studied and to apply them, as far as possible, in his own work; second, to inspire him with the noble ideals manifested in the lives and works of the great educational leaders and thus to arouse in him greater devotion to his calling. (*Required of Juniors; first semester;* 3 *hours.*)

EDUCATION VI*b.*—*Secondary Education.*—This course is designed to give insight into the problems of the secondary and high school. Many problems relating to the high schools in this and the other Southern States are gone over for the purpose of understanding the present situation and planning for better things. The following special topics may be mentioned: Psychology and Pedagogy of Adolescence, High School Athletics, History of Secondary Education, High School Courses, Comparative Study of Secondary Education in different countries. Lectures and reference work supplement the reading of several texts. (*Required of Juniors; second semester;* 3 *hours.*)

EDUCATION VII.—*The Principles and Philosophy of Education.*—This course attempts to select from modern psychology and sociology all the facts that will aid the teacher in obtaining a clearer insight into the workings of the child's mind in the process of learning. A few of the topics studied are: The brain and nervous system, the place of the body in education, attention, interest, imitation, the social, moral and religious aspects of education. (*Required of Seniors;* 3 *hours.*)

EDUCATION VIII*a.*—*Child Study.*—The aim of this course is to give the student an insight into the physical development and growth of the child, the meaning of protracted infancy, the origin and development of instincts, the development of intellect, heredity, individuality, abnormalities and the application of facts learned to school work, etc. (*Required of Seniors; first semester;* 3 *hours.*)

EDUCATION IX*b.*—*Practice Teaching.*—Knowledge of the principles, theory and of the history of education will better fit any teacher for his work, but these without concrete experiences and practice under direction will not give the best results. This course is so planned as to give such experience under the supervision of the professor in charge of the department in which the subject chosen for practice is taught. This practice teaching will occupy the same position as lab-

oratory work and will have the same proportion of credit. (*Required of Seniors; second semester;* 3 *hours.*)

SPECIAL COURSES FOR HIGH SCHOOL TEACHERS.—The folfowing courses are offered for the special preparation of high school teachers. Each course will give the teachers' point of view of the subject and will go over and organize the material that the special subject should cover in the high school. Attention will be given to the methods of presenting the subjects to a class. The best text-books and reference books will be pointed out, as well as recent books and magazine articles on the teaching of the subject. In the sciences the student will have the privilege of handling and setting up the apparatus used in making demonstrations before a class. Besides this he will be required to select lists of the most suitable apparatus for high school laboratories. Practice teaching in the Practice High School will be given to all who take these courses. In a word, the aim is to fit students to begin their teaching in an efficient manner without having to experiment for a year or two.

These courses are open only to teachers in the Junior, Senior and Graduate classes. Students are REQUIRED to take the course or courses that deal with the subject or subjects which they are preparing to teach; but none of the courses may be taken except after thorough study of the subject or subjects in question.

(1) EDUCATION X*b*.—*Methods of Teaching Agriculture in the High School.* (1 *hour; second semester. Professor Vernon.*)

(2) EDUCATION XI*b*.—*Methods of Teaching Botany in the High School.* (1 *hour; second semester. Professor Floyd.*)

(3) EDUCATION XII*b*.—*Methods of Teaching Chemistry in the High School.* (1 *hour; second semester. Professor Flint.*)

(4) EDUCATION XIII*a*.—*Methods of Teaching English in the High School.* (1 *hour; first semester. Professor Farr.*)

(5) EDUCATION XIV*b*.—*Methods of Teaching French in the High School.* (1 *hour; second semester. Professor Crow.*)

(6) EDUCATION XV*a*.—*Methods of Teaching German in the High School.* (1 *hour; first semester. Professor Crow.*)

(7) EDUCATION XVI*b*.—*Methods of Teaching History in the High School.* (1 *hour; second semester. Professor Ault.*)

(8) EDUCATION XVII*a*.—*Methods of Teaching Mathematics in the High School.* (1 *hour; first semester. Professor Keppel.*)

(9) EDUCATION XVIII*a*.—*Methods of Teaching Physics in the High School.* (1 *hour; first semester. Professor Benton.*)

OTHER DEPARTMENTS

Descriptions of the other subjects that may be taken by students in the Teachers College are, in order to avoid repetition, not printed here and can be found by reference to the Index.

NORMAL SCHOOL

COURSES AND REQUIREMENTS

The Normal School offers four courses:

Course I.—Spring Review Course.—This course covers both the contents and methods of teaching the subjects required for County and State Certificates and is designed for those engaged in teaching from four to six months in the year and desirous of renewing or advancing the grade of their certificates.

Course II.—One-Year Course.—This covers the same work as Course I, but is gone over more slowly and may be entered upon at any time during the year. Hours and classes are arranged to suit the special needs of the students.

There are no requirements for admission to either Course I or Course II and all teachers who can profit by either are welcomed. The character of the work leading to State and Special Certificates is described under Course IV; an outline of the work leading to a County Certificate is given below. The text-books adopted by the State Superintendent of Public Instruction will be used as the basis of instruction.

CURRICULUM, SPRING REVIEW

COUNTY CERTIFICATES

NAMES OF COURSES	NATURE OF WORK	HOURS PER WEEK
Agriculture		2
Algebra		4
Arithmetic		4
Civil Government		2
English Composition		2
English Grammar		2
Hygiene		2
Orthography		2
Pedagogy		2
Physical Geography		3
Political Geography		2
Reading		1
United States and Florida History		3

DESCRIPTION OF COURSES OF STUDY

AGRICULTURE, S. R.—An introduction to the study of soils, plants and their common diseases, insects, farm crops, domestic animals, etc. Text-books, laboratory and field work. Methods of teaching agriculture in the rural schools stressed. (2 *hours.*)

ALGEBRA, S. R.—The fundamental operations, simple and simultaneous equations, factoring, fractions, involution and evolution, quadratic equations, progressions, ratio and proportion. This work will be closely correlated with that in arithmetic. (4 *hours.*)

ARITHMETIC, S. R.—A thorough review of arithmetic from both the teacher's and the child's point of view. Common and decimal fractions, denominate numbers, percentage and other subjects covered by the text-book adopted by the State. Principles and methods of teaching arithmetic. (4 *hours.*)

CIVIL GOVERNMENT, S. R.—Local, town and city, county, State and national governments; methods of teaching the subject. Practical information stressed and general interest in government aroused. (2 *hours.*)

ENGLISH COMPOSITION, S. R.—Study of words, sentences, paragraphs and whole compositions; narration, description, exposition and argument; much practice in writing. Punctuation and spelling receive attention. Letter-writing. (2 *hours.*)

ENGLISH GRAMMAR, S. R.—Parts of speech; inflection; syntax, structure and analysis of sentences; principles and methods of teaching grammar. (2 *hours.*)

HYGIENE, S. R.—The body; functions and use of the organs. The importance of hygiene and sanitation, how to keep well and physically efficient. (2 *hours.*)

ORTHOGRAPHY, S. R.—The spelling of common words and best methods of teaching spelling stressed. Correct spelling in all written work demanded. (2 *hours.*)

PEDAGOGY, S. R.—School management, general and special methods of teaching, elementary principles of child nature, school hygiene and sanitation, personality of teacher, relation of school and community and other practical pedagogical questions. (2 *hours.*)

PHYSICAL GEOGRAPHY, S. R.—Study of the main topics found in the ordinary text-book on the subject. Stress placed on the effects that physical features have on man, commerce and society. Closely correlated with agriculture. (3 *hours.*)

POLITICAL GEOGRAPHY, S. R.—A thorough review of the geography of the United States and the world. Special attention to Florida and its relation to other States. Instruction in the use of text-books, maps, globes, industrial products, stereoscope, post-cards and newspapers. (2 *hours.*)

READING S. R.—Weekly practice in reading to the end that teachers may be able to read well to their classes. Story-telling. Methods and principles of teaching reading. (1 *hour.*)

UNITED STATES AND FLORIDA HISTORY, S. R.—A thorough review of United States and Florida history; their correlation with geography and literature; methods of teaching the subject. Special attention given to biography and the topic method of study. (3 *hours.*)

Course III.—Two-Year Elementary Professional Course.—This course includes all of the subjects taught in the elementary and rural schools. It gives special attention to methods of teaching, school management, rural problems and such professional subjects as will make rural and grammar school teachers more efficient. Applicants who hold teachers' certificates, or who have finished the eighth grade of a grammar school, will be admitted to the first year. On the completion of Course III, students will be admitted to the first year of the Four-Year Normal Course.

CURRICULUM, TWO-YEAR ELEMENTARY PROFESSIONAL COURSE

First Year

NAME OF COURSE	NATURE OF WORK	HOURS PER WEEK
Education 2-Yr I	Reviews and Methods of Teaching Political Geography, Reading, U. S. and Florida History	4
English 2-Yr I	Grammar, Composition and Classics	4
History 2-Yr I	Ancient History	4
Mathematics 2-Yr I	Algebra	4
Science 2-Yr I	Physical Geography and Physiology	4

Second Year

Education 2-Yr II	Reviews and Methods of Teaching Arithmetic and English Language	4
Education 2-Yr III	School Management and Rural Problems	4
English 2-Yr II	Composition and Classics	4
Mathematics 2-Yr II	Algebra	4
Science 2-Yr II	Agronomy and Horticulture	3

DESCRIPTION OF COURSES OF STUDY

EDUCATION 2-YR. I.—*Reviews and Methods of Teaching U. S. and Florida History, Reading and Political Geography.*—Thorough and complete reviews are made. The work is broader and more advanced than that of the eighth grade and is always looked at both from the teacher's and the pupil's points of view. History is studied in the fall, reading in the

winter and geography in the spring, the subject matter being first given and then the methods of presenting it to a class. (4 *hours.*)

EDUCATION 2-YR. II.—*Reviews and Methods of Teaching Arithmetic and English Language.*—Thorough and complete reviews are made and the difficult parts explained. Methods of teaching are given after the reviews are completed. (4 *hours.*)

EDUCATION 2-YR. III.—*School Management and Rural Problems.*—School organization, classification and discipline; school hygiene, recess and play; one- and two-teacher rural schools; grading rural schools; rural boys and girls; relation of teacher to child, home and community, etc. (4 *hours.*)

ENGLISH 2-YR. I.—*Grammar, Composition and Classics.*—A thorough course in advanced grammar (*twice per week*). Composition, oral and written. At least one written composition every week. Special attention given to narration. Spelling and letter-writing. Classics, College Entrance Requirements and those best suited for the upper grades of the grammar school and the ninth grade of the high school. (4 *hours.*)

ENGLISH 2-YR. II.—*Composition and Classics.*—A textbook in composition used as guide (*twice per week*). Description and narration receive the major part of the time. Oral and written composition. One written composition each week. Spelling and letter-writing. Classics (*twice per week*) suited to grade and high school work. (4 *hours.*)

HISTORY 2-YR. I.—*Ancient History.*—The major part of the time will be given to the study of the history of Greece and Rome. Special note of hero stories, biography, mythology and that which appeals to the child in the grades. Reference reading required in connection with the topics of the textbooks. (4 *hours.*)

MATHEMATICS 2-YR. I.—*Algebra.*—A beginner's course covering the work through elementary quadratics. (4 *hours.*)

MATHEMATICS 2-YR. II.—*Algebra.*—A thorough review of algebra to quadratics, then quadratics and the remaining part of an ordinary second-year algebra. (4 *hours.*)

SCIENCE 2-YR. I.—*Physical Geography and Physiology.*—The work in physical geography will be about as outlined in the newer secondary school geographies. The proper correlation of physical with political and commercial geographies —especially necessary for teachers. Laboratory and field

work with notes on all observations and experiments. Physiology will be given one semester and will cover a practical course in physiology, sanitation and hygiene. Laboratory work with notes required. (4 *hours.*)

SCIENCE 2-YR. II.—*Agronomy and Horticulture.*—Agronomy will be a study of soils and soil fertility in their relations to plant growth and the underlying principles governing the production of field and forage crops. (*First semester.*) The horticulture will be a study of varieties and culture requirements of our principal fruits and vegetables; location of orchards and gardens with reference to soils, climate and markets; protection from insects and diseases; harvesting and marketing; styles of decorative planting adapted to home and school. (3 *hours.*)

Course IV.—Four-Year Normal Course.—This course is similar to that of the standard normal schools of this country. Applicants who have finished the first two years of a high school will be admitted to the first year of this course. High school graduates will be allowed to enter the third year. Graduates of the Normal School will be admitted to the Junior class of the Teachers College.

CURRICULUM, FOUR-YEAR NORMAL COURSE

First Year

NAME OF COURSE	NATURE OF WORK	HOURS PER WEEK
English NI	Rhetoric, Composition and Classics	4
History NI	Mediaeval and Modern History	4
Mathematics NI	Plane Geometry	4
Take from 4 to 8 hours of the following:		
Latin NI	Beginner's Course	4
French NI	Beginner's Course	4
Spanish NI	Beginner's Course	4
Science NI	Physics	4
Mechanic Arts NI*a* and NII*b*	Wood Work	3
Agriculture NI	Elements of Agronomy and Horticulture	3
Required		16 to 20

Second Year

NAME OF COURSE	NATURE OF WORK	HOURS PER WEEK
English NII	American and English Literature and Composition	4
History NII	American History and Civics	4
Take from 8 to 12½ hours of the following:		
Latin NII	Caesar (4 books) and Composition	4
Mathematics NII	Plane Trigonometry and Solid Geometry	4
French NII	Second Year Course	4
Spanish NII	Second Year Course	4
Agriculture NII	Elements of Animal Husbandry and Agricultural Engineering	3
Science NII	Chemistry	4
Mechanic Arts NIII*a* and NIV*b*	Forge and Foundry Work	4½
Required		16 to 20½

Third Year

Education I*a*	Psychology	3
Education II*b*	Methods of Study	
English I	Rhetoric and Composition	3
Take 9 hours of the following:		
French I	Elementary Course	3
German I	Elementary Course	3
Spanish I	Elementary Course	3
Latin NIII	Cicero, Composition and Grammar	3
Mathematics	Plane Analytic Geometry and College Algebra	4
Physics I	General Physics	3
Agronomy I	General Agriculture	3
Botany I	General Botany	3
Chemistry I	General Chemistry	3
History I	Modern European	3
Military Science I		1
Required		16

Fourth Year

Education III*a* / Education IV*b*	Reviews and Methods of Teaching Arithmetic and Grammar; Reviews and methods of Teaching Reading, Geography and History; School Management	5
Education V*a*	History of Education	3
Education IX*b*	Practice Teaching	
*Group II		3
*Group III		3
*Group IV		3
Military Science II		1
Required		18

*See Groups, p. 49.

DEPARTMENTS OF INSTRUCTION

AGRICULTURE

AGRICULTURE NI.—See Agronomy A*a* and Horticulture A*b*, College of Agriculture.

AGRICULTURE NII.—See Animal Husbandry A*a* and Agricultural Engineering A*b*, College of Agriculture.

ENGLISH

Mr. Hathaway

ENGLISH NI.—*Rhetoric, Composition and Classics.*—The formal rules of rhetoric in so far as they are needed in composition work and the study of the classics. Compositions written every week. Exposition stressed. Spelling and letter-writing. Classics two hours per week. College Entrance Requirements. (*First year; 4 hours.*)

ENGLISH NII.—*American and English Literature and Composition.*—Most of the time of this class will be devoted to the study of literature and not of the history of literature. Much reading will be required. Compositions one per week. Argumentation stressed. Spelling and letter-writing. (*Second year; 4 hours.*)

FRENCH

Assistant Professor Cawthon

FRENCH NI.—*First Year.*—Pronunciation and reading aloud, dictation and conversation, the auxiliary and regular verbs, commoner irregular verbs, simple constructions and grammar. The reading of easy selections. (*First year; 4 hours.*)

FRENCH NI.—*Second Year.*—Work of first year continued. Translations from English into French, grammar and elements of syntax, short written exercises, dictation, conversation, reading of selections. (*Second year; 4 hours.*)

HISTORY

Professor Buchholz

Mr. Holland

HISTORY NI.—*Mediaeval and Modern History.*—The Age of Charlemagne down to the present time. Mediaeval history will be touched lightly, while stress will be placed upon English history. Text-book and reference reading required. (*First year; 4 hours.*)

HISTORY NII.—*American History and Civics.*—A general survey from the early discoveries to the present time. As far as possible, the work in civics will be studied in connection with the history. Stress will be laid upon the study of local history and geography; local industries; transportation and communication; organized community life and public health; local, State and national governments. Text-book and reference reading required. (*Second year;* 4 *hours.*)

LATIN

Mr. Hathaway
Mr. Holland

LATIN NI.—*Beginner's Latin.*—A good first-year book will be studied and completed. (*First, second or third year;* 4 *hours.*)

LATIN NII.—*Caesar, Composition and Grammar.*—Four books of Caesar will be carefully read. Prose composition and Grammar once a week. (*Second, third or fourth year;* 4 *hours.*)

LATIN NIII.—*Cicero, Composition and Grammar.*—Six orations of Cicero. Prose composition and grammar once a week. (*Third or fourth year;* 4 *hours.*)

LATIN NIV.—*Virgil, Composition and Grammar.*—Six books of Virgil. Prose composition and grammar once a week. (*Fourth year;* 4 *hours.*)

MANUAL TRAINING

Mr. Strong

MECHANIC ARTS NI*a.*—*Wood Work.*—Same as Carpentry and Wood Turning, College of Engineering. See page 112.

MECHANIC ARTS NII*b.*—*Elementary Wood Carving and Furniture Construction.*—Same as Cabinet Work, College of Engineering. See page 113.

MECHANIC ARTS NIII*a.*—*Forge Shop.*—Same as Forge I*a*, College of Engineering. See page 113.

MECHANIC ARTS NIV*b.*—*Foundry Practice.*—Same as Foundry I*b*, College of Engineering. See page 113.

MATHEMATICS

Assistant Professor Cawthon

MATHEMATICS NI.—*Plane Geometry.*—The first five books in plane geometry. (*First year;* 4 *hours.*)

MATHEMATICS NII.—*Solid Geometry and Plane Trigonometry.*—Study of the topics ordinarily covered by standard high schools. (*Second year;* 2 *hours each.*)

SCIENCE

Assistant Professor Cawthon
Mr. Martini

SCIENCE NI.—*Physics.*—Elements of physics; problems and laboratory work. Carefully kept note-books required. (*First year; 4 hours.*)

SCIENCE NII.—*Chemistry.*—Elementary principles of chemistry; text-book and laboratory work. Carefully kept note-books required. (*Second year*: 4 *hours.*)

SPANISH

Mr. Hathaway

SPANISH NI.—*First Year.*—Pronunciation and reading aloud, dictation, conversation, auxiliary and regular verbs, irregular verbs, simple constructions, grammar, reading of easy selections. (*First year; 4 hours.*)

SPANISH NII.—*Second Year.*—Work of first year continued. Translations from English into Spanish, grammar, elements of syntax, short written exercises, dictation, conversation, reading of selections. (*Second year; 4 hours.*)

PRACTICE HIGH SCHOOL

The former Sub-Collegiate division of the University has been made a part of the Teachers College and Normal School and its scope has been widened so as to make it a practice and model school for the students of education. Here student-teachers will have opportunity to observe the methods of skilled instructors, as well as to practice teaching under guidance the high school subjects in which they are most interested.

ADMISSION.—Only graduates of Junior high schools, or pupils who have finished work equal to that of the tenth grade, will be admitted. The number admitted to either grade will, furthermore, be limited to twenty-five. No pupil will be admitted who has not completed the course offered by the high school at his home, except upon the written application of parent or guardian, accompanied by the endorsement of his high school principal.

RESTRICTIONS.—The pupils of the Practice High School are considered boys and are not permitted to join any class, society, fraternity, athletic team or other organization con-

ducted for or by the University students. A pupil violating this regulation will be required to withdraw immediately from the High School.

STUDIES.—The work offered is that of the eleventh and twelfth grades of the standard high schools of Florida. Not less than eighteen nor more than twenty-two hours may be taken in any one year except upon special permission. English and mathematics are required the first year; English and history, the second. The remaining work may be chosen only after consultation with the Dean of the Teachers College. If a modern foreign language is chosen it must be pursued during both years.

HIGH SCHOOL CURRICULUM

Third Year or Eleventh Grade

NAME OF COURSE	NATURE OF WORK	HOURS PER WEEK
*English	Rhetoric, Composition and Classics	4
*Mathematics	Plane Geometry	4
Take 8 to 12 hours of the following:		
Latin	Beginner's, Caesar or Cicero and Composition	4
Spanish	Elementary Course	4
French	Elementary Course	4
History	Mediaeval and Modern	4
Science	Physics	4
Manual Training	Wood Work	3
Agriculture	Elements of Agronomy and Horticulture	3
Required		16 to 20

Fourth Year or Twelfth Grade

*English	American and English Literature and Composition	4
*History	American History and Civics	4
Take from 8 to 13½ hours of the following:		
Latin	Caesar, Cicero or Virgil and Composition	4
Mathematics	Solid Geometry and Plane Trigonometry	4
Spanish	Intermediate Course	4
French	Intermediate Course	4
Agriculture	Elements of Animal Husbandry and Agricultural Engineering	3
Science	Chemistry	4
Manual Training	Forge and Foundry Work	1½
Required		16 to 21½

*Required of all pupils.

CORRESPONDENCE COURSE FOR TEACHERS

The Teachers College and Normal School has prepared correspondence courses for teachers in such subjects as School Management, General and Special Methods of Teaching the various elementary and grammar school studies, Psychology and the History of Education. It is preparing courses in some of the regular academic subjects. Reading courses will also be outlined, for the completion of which certificates will be given.

These courses are open to all white teachers and should appeal to those who are not able to attend school or college and yet desire to continue their studies. For further information, address Dean Jno. A. Thackston.

STATE HIGH SCHOOL INSPECTION

This division of the College was made possible through the liberality of the General Education Board of New York. (See page 14.)

The Dean of the College will visit and inspect the high schools of the State, and promote in every way possible their development. He will give what aid he can toward establishing high schools where they do not exist. Whenever requested, he will gladly discuss with school officials or private citizens any educational matter that may tend toward the welfare and improvement of those already established.

TEACHERS' EMPLOYMENT BUREAU

This Bureau was instituted to assist teachers who had attended the University in securing positions and to furnish schools with efficient instructors. At the request of many school officials, however, the services of the Bureau have been placed at the disposal of every good teacher in the State. This has been done because of the scarcity of trained teachers and because of the difficulty county superintendents and high school principals often encounter in filling vacancies. Superintendents, principals and teachers throughout the State are invited to co-operate with the Bureau. Officials needing trained men or women and teachers desiring promotion or change are asked to call upon the Bureau for its aid. No charges are made for services.

UNIVERSITY SUMMER SCHOOL

(CO-EDUCATIONAL)

June 15—August 7, 1914.
June 14—August 6, 1915.

SUMMER SCHOOL BOARD

STATE SUPT. W. N. SHEATS, A.M., LL.D.
PRES. A. A. MURPHREE, A.M., LL.D.
PRES. EDWARD CONRADI, A.M., Ph.D.

FACULTY (1914)

A. A. MURPHREE, A.M., LL.D.,
President.

JNO. A. THACKSTON, Ph.D.,
Professor of Education and Psychology.

W. S. CAWTHON, A.M.,
Professor of Mathematics.

P. W. CORR, A.B.,
Professor of History.

E. L. ROBINSON, A.M.,
Professor of Latin.

W. L. FLYOD, M.S.,
Professor of Science.

I. I. HIMES, A.B.,
Professor of English.

MISS JESSIE MORRELL,
Professor of Primary Methods.

H. W. COX, Ph.D.,
Professor of Philosophy.

J. N. ANDERSON, Ph.D.,
Professor of Modern Languages and Advanced Latin.

GEO. M. LYNCH, A.B.,
Professor of Rural School Methods and Management.

C. K. McQUARRIE,
Director of Corn and Tomato Club Work.

GENERAL STATEMENT

The University Summer School was provided for by the "Summer School Act" passed by the Legislature of 1913. Section 1 of this Act reads, in part: "that there is hereby established and created in this State three summer schools to be located as follows: One in connection with the University of Florida at Gainesville, ... "

The entire equipment of the University is at the service of the faculty and students of the Summer School. The libraries, laboratories, dormitories and dining-hall are open during its session.

Board and lodging (including lights) will be offered at $4.00 per week, or $30.00 for the entire session of eight weeks, payable in either case in advance. Those occupying dormitory rooms must, however, furnish their own pillows, bed linen and towels.

Attention is directed to the following sections of the "Summer School Act."

CREDIT TOWARDS NORMAL SCHOOL AND COLLEGE DEGREES

Sec. 5.—"All work performed at the said Summer Schools shall be of such character as to entitle the students doing the same to collegiate, normal or professional credit therefor, and may be applied toward making a degree."

EXTENSION OF TEACHERS' CERTIFICATES

Sec. 6.—"All teachers attending any one of the Summer Schools herein created and whose work entitles them to credit therefrom upon making proof of the same to any County Superintendent of Public Instruction in this State are hereby entitled to one year's extension on any teacher's certificate they may hold and which has not fully expired."

Certificates of credit making proof of the work done will be granted by the State Superintendent and the President of the Summer School only to those teachers who attend the full term and whose work is satisfactory.

REGULATIONS.—To fulfil its highest mission the Summer School should not be utilized merely for the purpose of "cramming" for examinations. It is therefore hoped that all teachers will recognize the wisdom of the Summer School Board in establishing the following regulations:

1. No teacher shall be allowed to take more than twenty hours per week of purely academic subjects.

2. No teacher shall take less than five hours per week of professional work.

3. The maximum number of hours per week, including professional, vocational and academic subjects, shall, in no case, exceed twenty-seven. Two laboratory hours shall count as one hour of academic work.

COURSES OF STUDY

GROUP I.—*Education and Psychology.*—Theory and Practice of Teaching; Psychology; History of Education. (*Each* 5 *hours.*)

GROUP II.—*English.*—Reading and Spelling. (2 *hours.*) —Grammar and Composition; Rhetoric; English Literature. (*Each* 4 *hours.*)

GROUP III.—*Foreign Languages.*—Beginner's Latin; Caesar; Virgil; French or German. (*Each* 4 *hours.*)

GROUP IV.—*Civics and History.*—Civil Government. (2 *hours.*)—History of the United States and of Florida; General History. (*Each* 4 *hours.*)

GROUP V.—*Mathematics.*—Arithmetic; Algebra; Geometry; Trigonometry. (*Each* 4 *hours.*)

GROUP VI.—*Primary Methods.*—Drawing and Singing. (Number of hours to be arranged.)

GROUP VII.—*Science.*—Geography; Physiology. (*Each* 2 *hours.*)—Physical Geography; Botany; Zoology; Physics. (*Each* 4 *hours.*)

GROUP VIII.—*Vocational.*—Nature Study. (2 *hours.*)—Agriculture; Manual Training; Domestic Economy. (*Each* 4 *hours.*)

One advanced course of college grade will be offered in each Group, provided there is sufficient demand.

SPECIAL DEPARTMENTS

The following departments do not rightly belong under any individual college and are hence grouped here:

EXPRESSION AND PUBLIC SPEAKING

Mr. Chapman

EXPRESSION AND PUBLIC SPEAKING.—In the courses offered during the years 1910-1915, particular attention has been given to establishing a correct method of breathing, to correcting faulty articulation and to teaching the principles of interpretation by voice, gesture and facial expression. The interest shown in the work gives promise of being greatly increased during the coming year and it is confidently expected that the department will be able to offer a more comprehensive course than has hitherto been possible.

A small tuition fee is charged.

MUSIC

Mr. Miller

This department has direction of the University glee, guitar and mandolin clubs, of the student orchestra and of the music at the chapel exercises. Instruction has during the past year been given in voice culture, sight singing, violin and other stringed instruments. To this will be added lessons on the piano. A small fee is charged for instruction.

VOCAL.—Special attention is given to teaching control of breath and of singing muscles and to developing power, range and pureness of tone. All students of vocal music are required to take two lessons a week in sight singing and students not registered for the regular work are urged to attend the meetings of this class. In 1913-14 a choral society was formed which, in addition to part singing, undertakes at least one oratorio each year.

INSTRUMENTAL.—During the past year, in addition to training the student orchestra and other musical organizations, the Director has devoted a large part of his time to teaching the violin.

GLEE AND MANDOLIN CLUBS.—Membership in one of these clubs is urged upon all musically inclined students, both because of the training they receive and because of the pleasure they derive themselves and give others. Each year these or-

ganizations take several week-end trips to places in the vicinity of Gainesville and one longer trip. Mr. J. M. Chapman accompanies the clubs as "Reader."

MILITARY BAND.—The military band, organized early in the session of 1913-14 by Mr. G. D. Hamilton, has since then added much to the effectiveness of parades.

PHYSICAL CULTURE AND ATHLETICS

Mr. McCoy

GYMNASTICS.—All Freshmen are required to take three hours per week of gymnasium work under the direct supervision of the Physical Director. In the other classes the work is optional. The course consists of drills with dumb bells, Indian clubs, wands and free hand; heavy and light work on buck, German horse, parallel bars, horizontal bar, etc.; tumbling and mat; basket ball and other games. The more proficient gymnasts compete for positions on the "Varsity Gymnasium Team," which gives several public performances during the year and an exhibition during Commencement week.

ATHLETICS—Assisted by special coaches, when needed, the Physical Director trains the various athletic teams.

DIVISION OF UNIVERSITY EXTENSION

STAFF

ALBERT A. MURPHREE, A.M., LL.D.,
President of the University.

P. H. ROLFS, M.S.,
Director.

C. K. McQUARRIE,
State Agent in Charge of Farmers' Cooperative Demonstration Work and Farmers' Institutes.

A. P. SPENCER, M.S.,
District Agent for Central and South Florida, Farmers' Cooperative Demonstration Work.

E. S. PACE, B.S.,
District Agent for North and West Florida, Farmer's Cooperative Demonstration Work.

AGNES ELLEN HARRIS, B.S.,
Assistant State Agent for Women's Rural Clubs and Girl's Canning Clubs.

J. J. VERNON, M.S.A.,
In Charge of Agricultural Correspondence Courses.

J. A. THACKSTON, Ph.D.,
In Charge of Correspondence Courses of the Teachers College and Normal School.

C. L. WILLOUGHBY, B. Agr.,
Special Agent in Silo Construction.

GEORGE F. BABB, A.B., D.V.S.,
Field Agent in Hog Cholera.

J. M. SCOTT, B.S.,
Lecturer on Farm Crops and Animal Husbandry.

B. F. FLOYD, A.M.,
Lecturer on Citrus.

J. R. WATSON, A.M.,
Lecturer on Insects.

JOHN BELLING, B.S.,
Editor.

BESSIE V. GLOVER,
Secretary.

AGENTS FOR COUNTY COOPERATIVE DEMONSTRATION WORK

Name	*Postoffice*	*County*
Stafford Burgis	Gainesville	Alachua
E. W. Turner	Macclenny	Baker
B. V. Mathis	Panama City	Bay
O. L. Mizell	Dukes	Bradford
J. E. Yon	Blountstown	Calhoun
W. E. Allen	Lecanto	Citrus
W. E. Brown	Green Cove Springs	Clay
J. D. Brown	Lake City	Columbia
Jos. Crews	Wauchula	DeSoto
W. L. Watson	Jacksonville	Duval
S. W. Hiatt	Gonzalez	Escambia
M. C. Gardner	Greensboro	Gadsden
S. S. Smith	Jennings	Hamilton
J. T. Daniel	Brooksville	Hernando
R. T. Kelley	Plant City	Hillsboro
C. A. Fulford	Bonifay	Holmes
G. W. Belser	Marianna	Jackson
E. W. Lumpkin	Monticello	Jefferson
D. C. Geiger	Mayo	Lafayette
Wm. Gomme	Tavares	Lake
Frank Robinson	Tallahassee	Leon
A. W. Turner	Bristol	Liberty
D. R. McQuarrie	Madison	Madison
S. J. McCully	Berlin	Marion
Jas. Shaw	Hilliard	Nassau
C. H. Baker	Orlando	Orange
B. E. Evans	Kissimmee	Osceola
I. E. Soar	Dade City	Pasco
A. A. Lewis	Kathleen	Polk
O. O. Simmons	Botts	Santa Rosa
H. C. Lawton	Hastings	St. John
G. L. Herrington	Bushnell	Sumter
T. Z. Atkeson	Live Oak	Suwanee
T. H. Stripling	Perry	Taylor
J. C. Smith	DeFuniak Springs	Walton
D. G. McQuagge	Chipley	Washington

AGENTS FOR COUNTY CANNING CLUBS

Name	*Postoffice*	*County*
Miss Lila Fraser	Gainesville	Alachua
Miss Lizzie Dowling	Taylor	Baker
Mrs. T. E. Waldrup	Lake Butler	Bradford
Miss Nellie McQuarrie	Inverness	Citrus
Miss Lonny Landrum	Green Cove Springs	Clay
Mrs. A. J. Henry	Lake City	Columbia
Mrs. A. L. Monroe	Miami	Dade
Miss Allie Stribbling	Arcadia	DeSoto
Mrs. Nevada Reddick	Bonifay	Holmes
Mrs. Mollie Evers	Plant City	Hillsboro
Mrs. J. R. Moorhead	Ocala	Marion
Miss Anne B. Carson	Kissimmee	Osceola
Miss Verda Thompson	Lakeland	Polk
Miss Carrie Post	Dade City	Pasco
Miss Jessie Burton	Crescent City	Putnam
Miss Mozelle Durst	Sanford	Seminole
Miss Lucia Hudson	St. Augustine	St. John
Mrs. W. E. Quarterman	Live Oak	Suwanee
Miss Eloise McGriff	DeLand	Volusia
Miss Myrtie Warren	DeFuniak Springs	Walton

GENERAL STATEMENT

This Division seeks to carry the benefits of the University to every community in Florida. The material advantages to be thus derived by the State are apparent and have already been felt in nearly every county. Since, however, the interests of Florida are predominantly agricultural, the Division concerns itself mainly with agriculture.

The scope of the Division has been broadened from time to time, until now it includes the following lines of work:

1. Cooperative Demonstration Work:
   - (a) Demonstration Agents.
   - (b) Boys' Corn Clubs.
   - (c) Woman's Work:
     - (i) County Agents for Girls' Canning Clubs.
     - (ii) Work Among Rural Women.
   - (d) School for Demonstration Agents.
   - (e) Field Instruction.
2. Institutes:
   - (a) Farmers'.
   - (b) Women's.
   - (c) County Produce Contests.
   - (d) Train.
3. Correspondence Courses.
4. Publications.

FARMERS' COOPERATIVE DEMONSTRATION WORK

Farmers' Cooperative Demonstration Work originated with the Southern Education Board, which appropriated $10,000 to better rural conditions in Florida. On the advent of the boll weevil Congress voted an annual appropriation of about $20,000. The State Legislature of 1911 provided $5,000 annually—thus making about $25,000 available annually.

In 1909 the Hon. A. S. Meharg, of Mississippi, was placed in charge of the work in Florida and under his leadership great progress was made. By 1913 twenty-four counties had been organized, each with a County Agent. Owing to failing health, Mr. Meharg resigned on July 1, 1913. The Farmers' Cooperative Demonstration Work of the United States Department of Agriculture in charge of Dr. Bradford Knapp, Special Agent acting for the Honorable Secretary of Agriculture, then entered into an agreement with the University of Florida and with the Commissioner of Agriculture of the State of Florida, whereby the Demonstration and the Extension work of the State were placed under the same management. The University provides suitable office rooms and facilities on the campus for headquarters for handling the clerical work. It also pays one-half the salaries of the State and District Agents. When the State and District Agents are traveling exclusively for Farmers' Institute work all of the expense are paid from State funds.

The central management of the Farmers' Cooperative Demonstration Work, the Boys' Corn Clubs and the Girls' Canning Clubs, is under the direction of Mr. C. K. McQuarrie, State Agent for this work. The salaries of the County Agents and other local employees are met in part from funds, amounting to $20,000, appropriated by Congress to the U. S. Department of Agriculture. In addition to this, $5,000 is available for carrying on the Girls' Canning Club work and Women's Rural Work. The Smith-Lever Fund, amounting to $10,000, became available this year. These funds are further augmented by an appropriation from the State Legislature of $5,000 annually. The Farmers' Institute Work is provided for by a Legislative appropriation of $10,000.

Smith-Lever Act.—This Act of Congress became operative on the 1st of July, 1914. Through it the State of Florida receives $10,000.00 annually to be expended for agricultural

extension work. An additional amount of $6,491.00 will be available for the fiscal year beginning July 1, 1915, provided an equal amount be given to this work by the State. On July 1st, 1916, an additional amount of $11,898.00 will be available under the same provision. The conditional amount appropriated by this Act will increase yearly thereafter by $5,408.00 until the sum of $44,345.00 is reached. The purpose of the Act may be gained from the following quotation:

> "That cooperative agricultural extension work shall consist of the giving of instruction and practical demonstrations in agriculture and home economics to persons not attending or resident in said colleges in the several communities, and imparting to such persons information on said subjects through field demonstrations, publications, and otherwise; and this work shall be carried on in such a manner as may be mutually agreed upon by the Secretary of Agriculture and the State agricultural college or colleges receiving the benefits of this act."

The Act itself specifies that none of this money shall be used for the promotion of agricultural trains, and by the ruling of the Department none of it is applicable to the furtherance of Farmers' Institutes.

In accordance with the Smith-Lever Act, the University has made arrangements, which were agreed to by the Secretary of Agriculture, to extend the Cooperative Demonstration Work into additional counties in the State of Florida.

ORGANIZATION.—The State officers of the Farmers' Cooperative Demonstration Work consist of a Director, a State Agent, an Assistant State Agent for Girls' Canning Clubs and Women's Rural Work, District and County Agents.

The *Director* acts as the chief executive in shaping and directing the policies of the Demonstration Work.

The *State Agent* has direct supervision of the work in Florida, his duties being outlined by the Office of Farmers' Cooperative Demonstration Work, Washington, D. C.

The *Assistant State Agent* for Girls' Canning Clubs and Women's Rural Work is located at the Florida State College

for Women, Tallahassee. She has general charge and supervision of the Girls' Canning Clubs and the Women's Rural Work carried on by the County Agents.

Counties desiring to carry on Canning Clubs and Rural Work under this arrangement are allotted $300 annually, provided a like amount be raised for the purpose by individuals or organizations.

District Agents direct the County Agents, assist them in organizing for effective work, visit with them the cooperative farmers as often as practicable and supervise the Boys' Corn Clubs throughout their respective districts. Florida is divided into two districts: the western comprising the counties west of the Suwannee, the southern those east and south.

County Agents are usually selected from their respective home counties. In most cases choice is made of men who have made a success of their own farms. The County Agents must be familiar with the latest books and bulletins on farming, horticulture and live stock. Their duties are to enlist the cooperation of as many farmers as they can visit at least as often as once a month and to induce them to grow two or more staple crops according to improved methods. They keep complete records of all operations and file weekly reports with the District and State Agents, by whom reports are submitted to the main office in Washington, D. C.

Six hundred and seventy-five ($675.00) dollars is allotted from Federal funds to each county of Florida that takes up the Farmers' Cooperative Demonstration Work. Up to the present time it has been possible to accommodate 36 counties. Counties that have not yet secured the benefits of this apportionment should confer with the State Agent, Gainesville, Florida. In so far as cooperation is found and funds are available, all will be accommodated.

BOYS' CORN CLUBS.—These clubs are conducted under the direct supervision of the various County Agents, acting in cooperation with local schools and superintendents of public instruction.

Boys between the ages of ten and eighteen are eligible for membership. Each member is required to grow at least one acre of corn. Not infrequently the boy, using new methods of cultivation, raises more bushels to the acre than does the father, using old methods.

Awards are made upon the following basis:

		Per Cent
1.	Greatest yield per acre	30
2.	Best exhibit of 10 ears	20
3.	Best history of crop	20
4.	Greatest profit on investment (based on the commercial price of corn)	30
	Total	100

GIRLS' CANNING CLUBS.—These clubs are under the direction of the State Agent and the immediate supervision of Professor Agnes Ellen Harris, of the State College for Women, who finds hearty cooperation in the schools, especially in the rural schools, of the commonwealth.

Girls between the ages of ten and eighteen are eligible for membership. Each member is required to grow at least one-tenth of an acre of tomatoes or other vegetables.

Awards are made upon the following basis:

		Per Cent
1.	Quality	20
2.	Quantity	20
3.	Variety	20
4.	Profit	20
5.	History	20
	Total	100

SCHOOL FOR DEMONSTRATION AGENTS.—The Demonstration Agents are assembled annually at the University for two weeks' instruction, during which time the list of agricultural subjects taught is taken up and special attention given to the best methods of presenting these subjects to the demonstrators of the various counties.

FIELD INSTRUCTION.—In addition to the regular instruction given by demonstrators and cooperators, County Agents give, so far as their time permits, field instruction in the best methods of conducting farm operations.

RESULTS.—The following is a condensed statement of the work done in thirty-one counties during the year ending December 31, 1914:

Demonstrations:			
Corn	840	Acreage	3068
Cotton	282	"	984
Oat	166	"	2186
Burr Clover	40	"	74
Crimson Clover	49	"	70
Other Legume Crop	430	"	1341
Citrus Fruit	122		
Enrollment of Boys' Corn Clubs			1026
Number Completing Work			272

Value of Prizes in Work	$1895
Pastures established by Cooperators and Demonstrators	74
Rotations established by Cooperators and Demonstrators	162
Acres stumped in Demonstration Work by Cooperators and Demonstrators	8183
Acres limed in Demonstration Work by Cooperators and Demonstrators	773
No. of farmers fall plowing in Demonstration Work	1745
Farmers selecting corn seed in field	636
Improved farm implements purchased	2334
Average value of each	$15
Total official visits made by agents during year	17241
Total miles traveled by rail	16728
Total miles traveled by team and auto	50035
Number of letters written by County Agents	8325
Newspaper articles written by County Agents	493
Bulletins and circulars distributed by County Agents	21594
Farmers' Meetings attended by County Agents	330
Total attendance at same	13280
Purebred hogs purchased by Cooperators and Demonstrators	631
Average value	$15
Purebred cattle purchased by Cooperators and Demonstrators	243
Average value	$75
Purebred mares purchased by Cooperators and Demonstrators	239
Average value	$175
Number of hogs inoculated by Demonstration Agents (to December 15)	24409
Dipping vats built in counties in which agents are located	23
Silos built in counties in which agents are located	23
Farmers' organizations cooperating	43

FARMERS INSTITUTES

These bring directly to the workers of the soil the most recent discoveries and the latest teachings of agricultural experts and present them so that they can be easily understood. They are really short courses in agriculture and where they have been held for a number of decades the teaching is done as carefully as it is in any college or university. The amount of this work that can be done in Florida depends, however, directly upon the amount of support received.

The professors of the College of Agriculture are engaged primarily in teaching and the Staff of the Agricultural Experiment Station in investigating agricultural problems; nevertheless they give as much effort as possible to Farmers' Institutes, although there are necessarily many times when it would be disastrous to their main work for them to leave the University grounds.

How Organized.—When it is thought desirable to hold an Institute, arrangements are to be made with the Director of the Extension Division. At a preliminary meeting the people of the community should elect a president and secretary. These officers should select a suitable place for meeting, advertise the Institute, secure as large an audience as possible, and arrange for taking care of those who come.

During the last five years requests for Institutes have been so numerous and the funds for holding them so limited that it has been necessary to put nearly all on circuits. In special cases, however, it is possible and advisable to hold isolated Institutes, as, for instance, when in a restricted locality there is a severe outbreak of certain insects or diseases. Arrangements for such Institutes must be made with the Director. These Institutes are among the most profitable, but can be held only when they do not interfere too seriously with the regular work.

Equipment.—The Farmers' Institute squads are equipped with all necessary appliances. For the lecture work sixty large charts, each six feet square, are used. These tabulate the lectures so as to make the main points stand out clearly. To supplement the charts, about one hundred enlarged photographs, illustrating particular points, are carried. A stere-

opticon lantern, equipped for acetylene gas and electricity, is frequently found of use. With it are carried about five hundred views, varied enough to suit the interests of almost any part of the State.

WOMEN'S INSTITUTES.—As it is quite as important to disseminate information that will benefit farm homes as it is to teach improved methods of agriculture, *Women's Institutes* are now being held in nearly all the Southern States. The two movements go hand in hand, for better crops and better farms are one step in the direction of better homes. The Women's Institutes are perhaps the more important, for it is well known that farm homes are less likely to be supplied with modern utensils and to be managed properly than are the farms themselves.

Women's Institutes have been arranged in several different places since July 1, 1913. A member of the faculty of the State College for Women has assisted by discourses, lectures and demonstrations on different phases of home life: Sanitation in and about the home; food values of meat, cereals and vegetables, and the different methods of preparing them; furnishing the various rooms of the house, especially the dining-room and kitchen, so that the labor of the household may be lessened and made more effective. At each place the women organize a Home Improvement Club, electing a president, vice-president, secretary and treasurer. Such clubs are a basis for more aggressive work and are useful agencies for the improvement of rural society.

COUNTY INSTITUTES AND PRODUCE CONTESTS.—*Produce Contests* have been conducted in connection with *County Institutes* in Gadsden, Liberty and Polk counties. Small prizes for farm products, ranging from 50 cents to $5.00, were offered by merchants and others for the purpose of stimulating greater interest among the farmers. Additional prizes were subscriptions to the "Progressive Farmer," "Southern Planter" and "Florida Grower." These contests have resulted in bringing together exhibits of farm products and live stock that in quality would compare favorably with those at county fairs.

INSTITUTE TRAIN.—By running, in cooperation with the University, "Better-Farming Specials," the railroads of the State have indicated in previous years their desire to assist in agricultural development. This year, owing to lack of funds, the Extension Division was not able to engage in a similar un-

dertaking. Several trains, equipped and financed entirely by the railroads, were, however, run, although none of these made long trips. As far as possible the Extension Division cooperated in this work, and especially with the G. S. & F. R. R. in its effort to develop the farm lands in Florida through which its trains pass.

The Extension Division also joined the Southern R. R. in the endeavor to interest more farmers in dairying and to put this industry on a better basis. In every way possible, too, it furthered the purposes of the "Good Roads Train."

RESULTS.—The results from systematic work in Farmers' Institutes are felt almost immediately in the general improvement of agricultural conditions. In Florida, the activities of the Farmers' Institutes have been coincident with the greatest increase in crop production that the State has ever seen. To illustrate, the corn crop for 1907 was the largest produced up to that time, 4,351,000 bushels. That year 42 sessions of Institutes were held, with a total attendance of 4,491. The average corn production was 9.6 bushels per acre. In 1908, 6,584,000 bushels of corn were produced, at the rate of 10.5 bushels per acre. During this year 54 sessions were held, with a total attendance of 5,576. In 1909 the corn crop amounted to 8,379,000 bushels, with an average production of 12.6 bushels per acre. That year nearly 100 Institutes were held, with a total attendance of about 10,000. During the fiscal year ending June 30, 1913, 200 sessions of Institutes were held, with a total of 20,000 in attendance, and the corn production rose to 15 bushels per acre—more than fifty per cent increase of yield per acre since the beginning of systematic Farmers' Institute work. The total was 10,125,000 bushels. The corn yield for the year 1914 was 11,008,000 bushels and the average rate of production per acre was 16 bushels.

As corn shipped in from outside was selling at $1.00 to $1.20 a bushel, the total value of the crop must have exceeded $11,000,000, making corn second in money value only to citrus. The actual value of the corn crop exceeds that of citrus, for a large amount of it is used for food and the rest of it is fed to stock. Thereby the land is enriched and money is derived from the sale of stock.

As the majority of the sessions held in 1914 were designed for the improvement of the soil and of the corn crop, the In-

stitutes must have had a more or less beneficial effect upon production.

Other crops have been similarly improved; but corn, being the standard, serves best for illustrative purposes. And the increased production, due for the most part or entirely, to better farming methods, adds millions of dollars annually to the revenues of the farmers of the State.

ATTENDANCE.—During the six months ending December 31st, 1914, the total attendance on Farmers' Institutes was 13,377. The number of sessions held was 134, and the average attendance per session was 99. The attendance for the present fiscal year will probably exceed 20,000. The total number of addresses was 376, of which persons connected with the University delivered 275.

SPEAKERS FROM THE UNIVERSITY

A. A. Murphree, President.
P. H. Rolfs, Director of Experiment Station and of Extension Division.
C. K. McQuarrie, State Agent in Charge of Farmers' Cooperative Demonstration Work.
A. P. Spencer, Vice-Director of Extension Division and District Agent, Farmers' Cooperative Demonstration Work.
E. S. Pace, District Agent, Farmers' Cooperative Demonstration Work.
J. J. Vernon, Dean, College of Agriculture.
J. M. Scott, Animal Industrialist, Agricultural Experiment Station.
Harvey W. Cox, Professor of Philosophy and Education.
E. W. Berger, State Nursery Stock Inspector.
B. F. Floyd, Plant Physiologist, Agricultural Experiment Station.
S. E. Collison, Chemist, Agricultural Experiment Station.
John Belling, Assistant Botanist, Agricultural Experiment Station.
W. L. Floyd, Professor of Botany and Horticulture.
H. E. Stevens, Plant Pathologist, Agricultural Experiment Station.
J. R. Watson, Entomologist, Agricultural Experiment Station.
C. L. Willoughby, Professor of Animal Husbandry and Dairying.
W. B. Hathaway, Instructor in English, Latin and Spanish.
John Schnabel, Assistant Horticulturist, Agricultural Experiment Station.

OTHER SPEAKERS

C. K. Allen, Sopchoppy, County Supt. of Public Instruction, Wakulla County.
T. Z. Atkeson, Live Oak, County Agent, Farm Demonstration Work.
O. L. Mizell, Dukes, County Agent, Farm Demonstration Work.
R. E. Rose, Tallahassee, State Chemist.
E. H. Sellards, Tallahassee, State Geologist.
J. L. Shepard, Greensboro.
C. H. Simpson, Milton.
R. W. Storrs, DeFuniak Springs.

Edward Conradi, Tallahassee, President, State College for Women.
H. E. Savely, Washington, D. C., Field Agent, Farmers' Cooperative Demonstration Work, U. S. Department of Agriculture.
W. N. Conoley, Jacksonville, Secretary, Board of Trade, (Deceased).
W. A. Hendry, Perry.
Joseph Y. Porter, Jacksonville, Secretary, State Board of Health.
J. D. Rooney, Ocala, Secretary, Board of Trade.
R. E. Grabel, Charlotte, N. C., Farm Improvement Agent, G. S. & F. R. R.
Miss A. E. Harris, Tallahassee, Director, Household Economics, State College for Women.
Miss Mae L. Wells, Tallahassee, Asst. in Extension Division, State College for Women.
Dr. A. C. Drach, Atlanta, Ga., U. S. Bureau of Animal Industry.
D. R. McQuarrie, Madison, County Agent, Farm Demonstration Work.
Mrs. Marian A. McAdow, Punta Gorda.
Hon. W. A. McRae, Tallahassee, Commissioner of Agriculture.
Clarence Wood, Eustis.
W. L. Watson, Jacksonville, County Agent, Farm Demonstration Work.
C. F. Dawson, Jacksonville, State Veterinarian.
B. F. Bahnsen, Atlanta, Ga., State Veterinarian.
E. M. Nighbert, Atlanta, Ga., Expert in Tick Eradication, U. S. Bureau of Animal Industry.
Hon. J. W. Barber, Macclenny, President State Live Stock Association.
T. E. Waldrup, Macon, Ga., Field Agent, G. S. & F. R. R.
B. L. Hamner, Tampa.
Dr. H. G. Bijstra, Holder.
J. D. Molter, Gainesville.
E. B. O'Kelley, Jacksonville, Asst. Industrial Agent, A. C. L. R. R.
S. W. Hiatt, Gonzalez, County Agent, Farm Demonstration Work.
R. L. Turner, Inverness, County Supt. of Public Instruction, Citrus Co.
T. I. Clark, Quitman, Ga., Secretary Quitman Board of Trade.
Shelton Phillips, Williston, Inspector of Rural Schools.
T. K. Godbey, Waldo.
B. F. Olmstead, Live Oak.
Dr. Geo. F. Babb, Gainesville, Expert in Hog Cholera Eradication.
Joseph Crews, Wauchula, County Agent, Farm Demonstration Work.
W. E. Brown, Green Cove Springs, County Agent, Farm Demonstration Work.
Geo. M. Lynch, Gainesville, Inspector of Rural Schools.
Marshall Moore, Tampa, County Supt. of Public Instruction, Hillsboro Co.

OFFICERS OF LOCAL FARMERS' INSTITUTES

Alachua County—
Island Grove: J. R. Shaw, Pres.; H. M. Baker, Secy.
Trenton: C. A. Williams, Pres.; R. H. Jones, Secy.
Baker County—
Macclenny: W. C. Thompson, Pres.
Bay County—
Lynn Haven: W. R. S. Burnett, Pres.; Frank McMullen, Secy.
Panama City: Judge West, Pres.; H. G. Mathis, Secy.

Bradford County—
Heilbron: J. D. McCormick, Pres.; J. E. J. Wainwright, Secy.
Lake Butler: O. L. Mizell, Pres.; H. W. Hodges, Secy.
Providence: J. D. Stencil, Pres.; P. T. Taylor, Secy.
Worthington Springs: W. Williams, Pres.; T. B. Edwards, Secy.
Brevard County—
Eau Gallie: Dr. E. E. Macy, Pres.
Jamestown: J. H. Tiffany, Titusville, Pres.; Guy Austin, Secy.
Malabar: W. J. Jons, Pres.
DeSoto County—
Avon Park: Wm. King, Pres.; Norton T. Smith, Secy.
Bermont: E. E. Bailey, Pres.; G. W. Gatewood, Secy.
Fort Ogden: Jno. E. Williams, Pres.; Dr. W. H. Smoke, Secy.
Popash: Jos. Crews, Wauchula, Pres.; J. C. Carter, Crewsville, Secy.
Venus: B. F. Johnson, Pres.; J. M. Frye, Secy.
Wauchula: T. G. Wilkerson, Pres.; T. S. Golden, Secy.
Escambia County—
Cottage Hill: C. W. McDonald, Pres.
Ferry Pass: R. E. Jones, Pensacola, Pres.; Mrs. M. H. Fairchild, Pensacola, Secy.
Klondike: J. W. Jefferson, Cantonment, Pres.
Myrtle Grove School: Mrs. M. E. Graves, Pres.; F. L. Thompson, Secy.
Gadsden County—
Greensboro: Hon. J. L. Shepard, Pres.; M. N. Smith, Secy.
Havana: A. J. Smith, Pres.; C. D. Wilcox, Secy.
Hamilton County—
Jennings: B. W. Wells, Pres.; B. J. W. Blair, Secy.
Hernando County—
Brooksville: J. C. Nugent, Pres.; C. W. Colley, Secy.
Hillsboro County—
Knights: W. T. Watkins, Pres.; A. W. Carlton, Secy.
Lake Magdalene: Dr. A. G. Lowe, Pres.; B. E. Stall, Secy.
Valrico: B. L. Hamner, Pres.
Holmes County—
Bethlehem: Jno. Sylvester, Black, Ala., Pres.; J. E. Kelly, Black, Ala., Secy.
Bonifay: J. McLaughlin, Pres.; W. A. Sessoms, Secy.
Jackson County—
Malone: B. H. Hatton, Pres.; E. E. Anderson, Secy.
Lafayette County—
Mayo: D. C. Geiger, Pres.; J. J. Handley, Secy.
Lake County—
Clermont: C. H. Wilson, Pres.; H. E. Cook, Secy.
Grand Island: I. H. Adair, Tavares, Pres.; J. T. White, Tavares, Secy.
Groveland: W. A. Lyons, Pres.; G. A. Free, Secy.
Lee County—
Woodrow: C. H. Carrier, Pres.; A. M. Smith, Secy.

Liberty County—
Bristol: M. N. Herndon, Pres.; J. E. Peddie, Vice-Pres.; D. H. Freeman, Secy.
Madison County—
Lee: H. J. Jones, Pres.; G. W. Ponder, Secy.
Greenville: J. W. Grubbs, Pres.; H. W. James, Vice-Pres.; W. M. Taylor, Secy.
Madison: Prof. W. B. Cate, Pres.; W. M. Taylor, Secy.
Marion County—
Fort McCoy: H. W. Pilsbury, Pres.; Miss M. H. Scott, Secy.
Reddick: H. E. Tinker, Pres.; L. S. Light, Secy.
Summerfield: A. M. Buser, Pres.; H. R. L. White, Secy.
Nassau County—
Boulogne: A. L. Kilbury, Pres.; Miss Louise Cutler, Secy.
Callahan: W. W. Cushing, Pres.; D. H. Petree, Secy.
Hilliard: J. H. Topper, Pres.; A. G. Vensel, Secy.
Orange County—
Zellwood: C. H. Baker, Pres.; Wm. Edwards, Secy.
Osceola County—
St. Cloud: F. P. Wentworth, Pres.; W. P. Lynch, Secy.
Pasco County—
Zephyrhills: O. E. Briggs, Pres.; U. G. Clark, Secy.
Pinellas County—
Largo: W. A. Belcher, Pres.; H. J. Bosworth, Secy.
Polk County—
Davenport: F. B. Hitchcock, Pres.; H. E. Sands, Secy.
Ft. Meade: R. W. Hancock, Pres.; Kline O. Varn, Secy.
Lakeland: Judge W. S. Preston, Pres.; Dr. W. H. Conibear, Secy.
Putnam County—
Mannville: H. T. Mann, Secy.
Santa Rosa County—
Allentown: R. T. Oglesby, Pres.; Oliver Jernigan, Secy.
Milton: C. H. Simpson, Pres.; S. J. Harvey, Secy.
Wallace: Curtis Jernigan, Pres.; J. H. Haines, Secy.
Sumter County—
Webster: Prof. Glen Terrell, Pres.; L. L. Sutton, Secy.
Suwanee County—
Live Oak: W. J. Hillman, Pres.; Jack Hawkins, Secy.
Taylor County—
Perry: J. C. Calhoun, Sr., Pres.; W. A. Hendry, Secy.
Wakulla County—
Medart: C. B. Pigott, Arran, Pres.; Wm. Green, Arran, Secy.
Sopchoppy: W. H. Harms, Pres.; Prof. C. K. Allan, Secy.
Walton County—
Glendale: Wm. Murphy, Pres.; J. W. Henderson, Secy.
Knox Hill: N. A. McLeod, Pres.; J. L. King, Secy.
Santa Rosa: W. M. Wilson, Pres.; A. B. Cessna, Secy.
Washington County—
Chipley: J. R. McColsky, Pres.; C. E. Pleas, Secy.

CORRESPONDENCE COURSES

Correspondence courses for teachers, farmers and others are offered. For a description of these and the requirements for registration, see pages 97 and 145.

PUBLICATIONS

The Extension Division issues numerous press bulletins and publishes from time to time reprints of Agricultural Experiment Station bulletins and compilations from other sources that contain information of timely interest.

The following bulletins have appeared:

112. Tomato Insects, by J. R. Watson.

117. Tomato Diseases, by P. H. Rolfs.

118. Sugar Cane and Syrup Making, by A. P. Spencer.

119. Fungus Diseases of Scale Insects and White Fly, by P. H. Rolfs and H. S. Fawcett.

120. Irish Potatoes, by A. P. Spencer.

University Record, Vol. IX, No. 1 (Farmers' Institute Bulletin, No. 4).

AGRICULTURAL EXPERIMENT STATION

P. H. ROLFS, *Director*

STAFF.—P. H. Rolfs, John Belling, H. G. Clayton, S. E. Collison, B. F. Floyd, A. C. Mason, Julius Matz, Edgar Nelson, John Schnabel, J. M. Scott, C. D. Sherbakoff, H. E. Stevens, S. S. Walker and J. R. Watson.

AIM AND SCOPE.—Agricultural experiment stations are institutions, founded by Congressional act, the purpose of which is to acquire and diffuse useful agricultural knowledge. From the enacting clause it is evident that Congress intended to establish with every college and university receiving the benefits of the original "Land-Grant Act" an institution for purely investigational work. The Florida Agricultural Experiment Station was founded in 1888 and has continued without interruption since that time. Inasmuch as its funds are received from a Federal source, it must comply with the requirements of the Federal law. It should, therefore, be clearly understood that its income must be used for the purpose of acquiring new and important knowledge in regard to agricultural crops and soils and that no part can be expended, directly or indirectly, for teaching purposes or for holding Farmers' Institutes and only five per cent for building or making repairs. In order to receive the benefits of the Adams fund, furthermore, the Station must submit plans for proposed experiments to the United States Department of Agriculture for approval before any of the moneys are spent in investigation.

ADVANTAGES OF LOCATION.—The advantages of having the Agricultural Experiment Station at the University are obvious. The investigators deliver at frequent intervals popular and technical lectures, either to the student body as a whole or to special clubs and local organizations. As the fields and orchards of the Station are used solely for experimental purposes and as its laboratories are planned and conducted for purely investigational work, they contribute to the opportunities of the students for studying methods of scientific investigation. Some of those who have special inclinations towards the lines of investigation carried on have had an opportunity of assisting the specialists in charge.

Minor positions, such as those of laboratory assistants, are occasionally open and, whenever practicable, are given to graduates of the University. Such assistants are paid a small salary for half of their time and during the other half are free to take studies leading to higher degrees.

BUILDING.—See page 18.

LINES OF INVESTIGATION.—The lines of investigation carried on by the Agricultural Experiment Station fall naturally into several departments: Horticulture, including the introduction, breeding and propagation of plants; Animal Industry, including the study of feed crops, the effect of feeding certain crops to cattle and hogs and the growing of feed and forage crops; Agronomy, including the breeding of cotton, corn and other farm crops; Plant Pathology, including the study of plant diseases produced by fungi and bacteria; Plant Physiology, including the study of plants as affected by fertilizer and soil conditions; Chemistry, including the study of fertilizers and soils, especially as to their effects on plants; Entomology, including the study of insecticides, insects and their parasites. The work of the Station is, however, not sharply divided as to these different departments. The Staff formulate what are known as projects. In these projects the work is continued regardless as to whether its ramifications take it into one or another department and not infrequently two or more departments are concerned in the solution of the same project —in other words, the work is limited only by the abilities of the Staff and the resources of the institution.

PROJECTS.—Some of the more important are:

1. The comparison of the Florida velvet bean with bran, silage and other feeds for milk production.
2. The comparison of home-grown roughage with ordinary commercial roughage for milk production.
3. The determination of the value of Florida-grown feeds for pork production.
4. The breeding of legumes, especially Lyon and velvet beans and cowpeas, for larger crop production under Florida conditions.
5. The breeding of thoroughbred varieties of corn that will produce larger yields and true to type.
6. The growing and breeding of selections from velvet bean hybrids.
7. The development of a citrus orchard that ultimately should include all the earlier and hardier varieties of citrus fruits.
8. The development of a vegetable garden in which tests can be made of various vegetables and breeding work can be done for the production of disease-resistant varieties.
9. The development of a hardy fruit orchard containing new and promising but hitherto untested fruits.
10. The testing of nearly thirteen hundred varieties of economic plants not heretofore tested in Florida. The seeds are obtained from various regions similar in climate to Florida.

11. The growing of forage crops useful for horses, cattle and swine.

12. The making of a permanent pasture.

13. Soil and fertilizer studies: (a) the effect of quantity and kind of chemicals applied to citrus trees—that is, the effect upon the composition of the leaves, wood and fruit and the physiological effect on the plants; (b) the effect of these same chemicals upon the soil to which they are applied; the loss of the plant food by leaching or by escaping as gaseous ammonia or nitrogen.

14. The study of citrus diseases, including gumming, buck-skinning, stem-end rot, and others, that have hitherto caused a great deal of loss, but have never been worked up from a technical standpoint.

15. The study of the three principal species of whitefly that are pests in the citrus orchard; their life histories, with a view to discovering their most vulnerable points of attack; and their natural enemies, with a view to finding out the best artificial means of controlling them.

16. Nutrition and malnutrition studies, especially of plant foods in their relation to citrus and of disorders apparently due to unfavorable soil or fertilizer conditions.

PUBLICATIONS.—The publications of the Agricultural Experiment Station are restricted to a report of the work done by members of its Staff. The printing with Federal funds of compilations and information of a general nature is not permitted.

There are three series of publications:

Experiment Station Bulletins, each of which represents a more or less complete thesis on some particular line of work directly connected with the agriculture or horticulture of Florida. These bulletins must be issued as often as once in three months. Additional numbers are issued whenever deemed advisable. In this series one hundred twenty-seven bulletins have appeared.

Press Bulletins prepared especially for the newspapers of the State. They announce new and important discoveries and give other information, directly connected with the activities of the Station, thought to be of immediate value. They are issued at short intervals, usually only a week elapsing between successive numbers. Two hundred thirty of these have been published.

Annual Reports to the Governor of Florida and to the United States Department of Agriculture. These contain a financial statement of the expenditures of the funds of the preceding year and a brief resume' of the work done by the Station as a whole and by the various departments in detail. Twenty-four such reports have been issued.

More than a million pieces of mail matter have been distributed under the Station frank.

STATE NURSERY STOCK INSPECTION

E. W. BERGER, *Inspector*

The law (Laws of Florida, Chap. 6156) establishing a system of inspection and regulating the sale and exchange of nursery stock empowers the Board of Control to make the necessary provisions for carrying its purposes into effect. It further provides for an inspector and as many deputy inspectors and assistants as may be needed. The inspector's office is located by this law at the University, in the building of the Agricultural Experiment Station.

The present inspector, previously entomologist to the Agricultural Experiment Station, entered upon the duties of his office on July 1st, 1911. At present there are twenty deputy inspectors, whose duties are mainly to inspect nursery stock in the vicinity of their respective communities.

That Florida has long been in need of a nursery inspection law will be conceded by all interested in horticulture. Because of the present law the further spread of such pests as the whitefly of citrus and the San Jose Scale of peach and kindred trees is being rapidly checked; the danger of spreading broadcast by means of nursery stock such localized insects and diseases as Cottony Cushion Scale, California Red Scale and the Scaly Bark disease of citrus has been reduced to a minimum; the risk of introducing dangerous insects and diseases from other States is greatly lessened and that of receiving new pests from foreign countries has been practically eliminated.

The inspector frequently has the opportunity of imparting information concerning insects and diseases and of suggesting the best means of eradicating them or of checking their increase.

Circulars are published from time to time intended to explain the operation of the law and make known the rules and regulations in force or to give aid to nurserymen and others in checking the spread of dangerous insects and diseases. Up to the present time there have appeared the following:

1. The Law. Rules and Regulations.
2. An Announcement to the Press of the State.
3. Additional Rules and Regulations—Mexican Cotton Boll Weevil, Mango Weevil, Irish Potatoes, Fruit Flies. Exceptions to Rule 1.

4. Rules and Regulations, 34 to 38 (inclusive), on Irish Potatoes Suspended.
5. Desirability of Buying only Defoliated Nursery Stock.
6. The Mexican Cotton Boll Weevil.
7. Revision of Rule 6. Abolishment of Rule 9. New Rule, 44, Adopted.
8. Warning to Citrus Growers—Citrus Canker.

The advantages of having the inspector's office in the building of the Agricultural Experiment Station are obvious. It saves the time of the inspector and adds to his efficiency for him to be able, when he is in doubt about an insect or a disease, to consult with other specialists across the hall or on the University campus, and may obviate the necessity of lengthy correspondence. The inspector has, furthermore, easy access to the libraries, both general and departmental, of the University.

REGISTER

DEGREES AND HONORS

1913-1914

DEGREES IN COURSE

Master of Arts

Cawthon, William Stanmore, A.B. (Chicago)..... Gainesville, Fla.

Master of Arts in Education

Blanton, Robert Solter, A.B..... Plant City, Fla.

Bachelor of Arts

Swanson, Thomas Joseph..... Gainesville, Fla.
Traxler, Leon William..... Alachua, Fla.

Bachelor of Arts in Education

Goulding, Robert Lee..... Pensacola, Fla.

Bachelor of Science

Bird, Thomas Buckingham..... Monticello, Fla.
*Holden, Samuel Sprague..... Brooklyn, N. Y.
Williams, Joseph Emory..... Haskell, Fla.

Bachelor of Science in Agriculture

Badger, Donald Minor..... Minneapolis, Minn.
Clayton, Harold Gray..... Tampa, Fla.
Conant, Harold George..... Minneapolis, Minn.
Gist, Joshua Fenby..... McIntosh, Fla.
Grace, James Thaddeus..... Graceville, Fla.
Houghtaling, Harold Charles..... New York, N. Y.
Martini, Charles Andrew..... Van Wert, Ohio
Miller, James Anthony..... Independence, Mo.
Schulz, William Henry..... Eau Claire, Wis.
Shaw, Alexander Glencairn..... Tampa, Fla.
Springer, John Rice..... Pitman, N. J.
Wilson, Guy Hawkins..... Gainesville, Fla.

Bachelor of Science in Civil Engineering

DeWinkler, August..... Arch Creek, Fla.
McNeill, Malcolm Collins..... Tallahassee, Fla.
Price, John Carey..... Warrenton, N. C.
Swanson, Frank Marion..... Gainesville, Fla.
Tenney, Louis Earle..... Federal Point, Fla.
Thalimer, Howard Alverson..... DeFuniak Springs, Fla.
White, David Lindsay..... Citra, Fla.

Bachelor of Science in Electrical Engineering

Becker, Neils Richard Alwyn..... Jacksonville, Fla.
Crom, George Curtis, Jr..... Gainesville, Fla.
Crom, William Hampton..... Gainesville, Fla.
Hill, Frederick William Landis..... Narcoossee, Fla.
Parham, Wallace Cecil..... Gainesville, Fla.

*Class of 1910.

Bachelor of Science in Mechanical Engineering

Crom, William Hampton ..... Gainesville, Fla.
LaRoche, Charles Clement ..... Cocoa, Fla.

Bachelor of Laws

Alexander, Leon Wilson ..... Jacksonville, Fla.
Arnold, Albert Charles ..... Jacksonville, Fla.
Baxter, Maxwell ..... Blacksbear, Ga.
Blackman, Worthington, A.B. (Rollins College) ..... Winter Park, Fla.
Buie, Archie Patterson ..... Bell, Fla.
Henderson, Robert Abner, Jr. ..... Fort Myers, Fla.
Hill, William Luther ..... Gainesville, Fla.
Knight, Albion Williamson, A. B.
(University of the South) ..... Jacksonville, Fla.
Lischkoff, Leon Nathaniel ..... Pensacola, Fla.
McGarry, Paul David ..... Jacksonville, Fla.
Mobley, Paul Darling ..... Punta Gorda, Fla.
Moore, Thomas Wesley ..... Jacksonville, Fla.
Owens, Frank Emory ..... Eustis, Fla.
Perry, Peter Richard ..... St. Augustine, Fla.
Peterson, James Hardin ..... Lakeland, Fla.
Poppell, Joseph Clayton ..... Starke, Fla.
Pruitt, Thomas Pitts ..... Tallahassee, Fla.
Ray, Thomas Carleton ..... Marianna, Fla.
Shackleford, Robert Wooten, A.B. ..... Tallahassee, Fla.
Smith, Thaddeus Hentz ..... Marianna, Fla.
Sutton, John Brannon ..... Lakeland, Fla.
Taylor, Robert Rives, Jr. ..... Miami, Fla.
Welch, Conlyn Lehman ..... Tampa, Fla.
Wiggins, Chester Maurice ..... Hawthorn, Fla.
Wilder, Alonzo DeWitte ..... Orange, Fla.

PHI KAPPA PHI

Class of 1915

Boyer, C. A. ..... Law
Bryant, T. W. ..... Law
Hainlin, N. E. ..... Agriculture
*Hallowes, J. P. ..... Engineering
*Harn, S. P. ..... Agriculture
Jarrell, R. L. ..... Law
Johns, E. W. ..... Law
Maguire, R. F. ..... Law
Robertson, C. A. ..... Arts and Sciences
Wilson, B. C. ..... Law

PRIZES

Senior Oratorical Medal ..... N. R. A. Becker
Junior Oratorical Medal ..... A. M. Rabinovic
Declaimer's Medal ..... L. C. Crofton
U. D. C. Medal ..... H. L. DeWolf
Buckman Medal ..... J. P. Hallowes
Callaghan and Co's Law Prize ..... A. W. Knight

*Elected in Junior year.

ROLL OF STUDENTS

1914-1915

GRADUATE SCHOOL

Campbell, B. C., A.B. (Columbia University)		Gainesville
Philosophy		Alachua
Clayton, H. G., B.S.A.		Tampa
Agriculture		Hillsboro
Hadley, M. B., A.B. (Yale University)		Gainesville
Zoology and Chemistry		Alachua
Hatcher, J. F., A.B. (University of Oklahoma)		Gainesville
Education		Alachua
Martini, C. A., B.S.A.		Gainesville
Animal Husbandry		Alachua
Mason, A. C., B.S. (Michigan Agricultural College)		Saline
Biological Sciences		Michigan

COLLEGE OF ARTS AND SCIENCES

Seniors

Name	*Postoffice*	*County or State*
Barrs, N.	Gainesville	Alachua
Brown, M. F.	Lawtey	Bradford
Campbell, A. D., Jr.	Chipley	Washington
Coarsey, J. M.	Tampa	Hillsboro
Halma, Fred	Gainesville	Alachua
Hearin, J. L.	Quincy	Gadsden
Helm, E. B.	Miami	Dade
Robertson, C. A.	Tallahassee	Leon
Terry, R. P.	Lakeland	Polk
Traxler, E. S.	Alachua	Alachua
Yarbrough, T. T.	Miccosoukee	Leon

Juniors

Anderson, W. C.	St. Petersburg	Pinellas
Barber, B. D.	Tallahassee	Leon
Bishop, C. P.	Eustis	Lake
Dyrenforth, L. Y.	Anona	Pinellas
Jackson, A. C.	Micanopy	Alachua
Kindseth, G. M.	Red Lake Falls	Minnesota
McElya, N.	Gasparilla	DeSoto
Peeples, H. W.	Valdosta	Georgia
Reid, A. L.	Fort Meade	Polk
Wood, P. W.	Tampa	Hillsboro

Sophomores

Brown, G. W.	Lawtey	Bradford
Caswell, C. C.	St. Petersburg	Pinellas
Farrior, J. R.	Chipley	Washington
Gracey, J. B.	Smyrna	Tennessee
Hart, Gordon	Lakeland	Polk
Henderson, W. B.	Tampa	Hillsboro
Holland, F. L.	Bartow	Polk
Jackson, R. I.	Lakeland	Polk
Padgett, S. D.	Lake Butler	Bradford
Ramsdell, A. W.	Tampa	Hillsboro
Yon, E. M.	Blountstown	Calhoun

Freshmen

Name	*Postoffice*	*County or State*
Bailey, G. R.	Monticello	Jefferson
Bishop, B. O.	Gainesville	Alachua
Brannon, C. S.	Ocoee	Orange
Bryan, J. S.	West Palm Beach	Palm Beach
Byrd, C. B.	Live Oak	Suwanee
Cone, A. J.	Gainesville	Alachua
deGaris, I.	Milbrook	New York
Freeman, E. W.	Starke	Bradford
Futch, I. S.	Alachua	Alachua
Glazier, G. M.	Oneco	Manatee
Goldberg, R. A.	Madison	Madison
Gordon, H. C., Jr.	Tampa	Hillsboro
Grant, F. M.	Graceville	Jackson
Green, R. P.	Elmira	New York
McMullen, P. R.	Largo	Pinellas
McRory, G. W.	Tampa	Hillsboro
Palmer, H. A.	Tallahassee	Leon
Perry, W. F.	Fruitland Park	Lake
Pooser, F. E.	Dunedin	Hillsboro
Powell, J. M.	Alachua	Alachua
Rouse, D. V.	Dover	Hillsboro
Wade, Hampton A.	Fort Myers	Lee
Willis, E. M.	Williston	Levy
Zetrouer, H. F.	Rochelle	Alachua

Specials

Armstrong, E. L.	Gainesville	Alachua
Chillingworth, C. E.	West Palm Beach	Palm Beach
Dicran, H.	Gainesville	Alachua
Folsom, J. Y., Jr.	Marianna	Jackson
*Godwin, J. L.	Miami	Dade
*Gray, R. F.	Gainesville	Alachua
Hancock, A. R.	Tallahassee	Leon
Harmony, G. W.	Gainesville	Alachua
Hatton, L. M., Jr.	Tampa	Hillsboro
Keating, W. B. C.	Daytona Beach	Volusia
Levis, N. K.	Gainesville	Alachua
*McClung, M. L.	Pensacola	Escambia
McGeachy, W. A.	Dade City	Pasco
Maner, G. D.	Warrenton	Georgia
Moseley, P. H.	Tampa	Hillsboro
Reed, C. E., Jr.	Bartow	Polk
Rosenbusch, C. H.	Green Cove Springs	Clay
Schuyler, L.	Jacksonville	Duval
Simonton, J. M.	Micanopy	Alachua
Sutton, J. B.	Lakeland	Polk
Thrasher, B. E.	Micanopy	Alachua
Turnley, W. H.	Fort Meade	Polk
*Watson, J W., Jr.	Miami	Dade
Wilson, E. F.	New Smyrna	Volusia

*Not fully registered, entrance credits incomplete.

COLLEGE OF AGRICULTURE

Seniors

Name	*Postoffice*	*County or State*
Gracy, B B., Jr.	Smyrna	Tennessee
Hainlin, N. E.	Homestead	Dade
Harn, S. P.	Mooresville	Alabama
Jackson, T. U.	Lakeland	Polk
McDowall, C. D.	Gainesville	Alachua
McPherson, R. J.	Juniper	Gadsden
Musser, A. M.	Conant	Lake

Juniors

Bishop, C. P.	Eustis	Lake
Dukes, R. A.	Worthington	Alachua
Gleichman, M. I.	Largo	Pinellas
Grace, C. B.	Evinston	Alachua
Gunn, C. D.	Marianna	Jackson
Pancoast, B. K.	St. Petersburg	Pinellas
Rich, E. E.	Salisbury	Massachusetts
Taylor, W H., Jr.	Greenwood	Jackson
Wong, Y. K.	Hong San	Kwongtong, China

Sophomores

Briggs, W. R.	Zephyrhills	Pasco
Johnson, J. A.	St. Petersburg	Pinellas
Jones, A. F.	Nichols	South Carolina
Mann, C. M.	Fernandina	Nassau
Stebbins, C. W.	Thonotosassa	Hillsboro
Thompson, F. L.	Pensacola	Escambia

Freshmen

Edwards, F. R.	Jacksonville	Duval
Futch, I. S.	Alachua	Alachua
Goldsby, J. K.	Fort Myers	Lee
Manecke, Otto	Brooklyn	New York
Smalley, R. C.	St. Petersburg	Pinellas
Sparkman, J. K.	Tampa	Hillsboro
Storms, D. A.	Zephyrhills	Pasco
Sullivan, A. J.	Virginia	Minnesota
Tillman, J. M.	Bartow	Polk
Tyndale, H. R.	Merrill	Wisconsin
Wood, Harry E.	Evinston	Alachua

Specials

Peeples, H. W.	Jacksonville	Duval
Armstrong, E. L.	Gainesville	Alachua

Middle Course

Allen, M. B.	Ambridge	Pennsylvania
Barkwell, E. W.	Crooked Lake	Polk
Bradford, T. N.	Vero	St. Lucie
Caldwell, B.	Gainesville	Alachua
Crawford, H. C.	Tallahassee	Leon
Durrance, J.	Bowling Green	DeSoto
Finlayson, E. H.	Ashville	Jefferson
Ford, W. H.	Vero	St. Lucie
Helseth, G. A.	Oslo	St. Lucie
Hinson, A. W.	Hinson	Gadsden
Maldanado. E.	Gainesville	Alachua
Mathews, E. W.	Leesburg	Lake
McCluer, D. H.	Fellsmere	St. Lucie

Patterson, J. B.	Chaires	Leon
Robnett, P. H.	Gainesville	Alachua
Schweizer, A. V.	Philadelphia	Pennsylvania
Shoemaker, L. C.	Winter Haven	Polk
Tribble, H. R.	Lake City	Columbia
Watkins, W. H.	Milwaukee	Wisconsin

Two-Year Course

Cooper, F. C.	St. Louis	Missouri
Fielding, E.	Miami	Dade
Fouts, M. L.	Gainesville	Alachua
Hecker, F. J.	Century	Escambia
Knight, D. S.	St. Louis	Missouri
Lee, T. G.	Orlando	Orange
Lyle, V. W.	Bartow	Polk
McMullen, H. L.	Clearwater	Pinellas
Millidge, S.	Homestead	Dade
Montgomery, J. E.	Tampa	Hillsboro
Nieland, C. J.	St. Johns Park	St. John
Nieland, E. R.	St. Johns Park	St. John
Oliphant, R. G.	Manatee	Manatee
Pittman, R. B.	Punta Gorda	DeSoto
Sloan, G. D.	Bartow	Polk
Smith, Paul Alden	St. Petersburg	Pinellas

One-Year Course

Annadown, T. S.	Pasco	Pasco
Bass, L. H.	Rome	Georgia
Diaz, C. J.	Pensacola	Escambia
Diaz, R. J.	Pensacola	Escambia
Johnson, T. N.	Gretna	Gadsden
Koepke, R. V.	Cleveland	Ohio
Opitz, E. W.	Philadelphia	Pennsylvania
Schmidt, W. E.	Chicago	Illinois
Shelfer, C. O.	Quincy	Gadsden
Smith, L. T.	DeFuniak Springs	Walton
VanDuzer, C. J.	Athens	Pennsylvania

Four-Month Course

Burke, E.	Lynn Haven	Washington
Ingram, P. G.	Daytona	Volusia
Scott, E. F.	Irvine	Marion

Ten-Day Course for Farmers

Bauer, L. D.	Sunbeam	Duval
Blair, H.	Jennings	Hamilton
Brown, J. D.	Lake City	Columbia
Brown, W. A.	Bradentown	Manatee
Council, R. B., Jr.	Tallahassee	Leon
Davis, E. N.	Plant City	Hillsboro
Davis, W. P.	Wauchula	DeSoto
Diaz, I. J.	Pensacola	Escambia
Diaz, R. J.	Pensacola	Escambia
Evers, F. O.	Alafia	Hillsboro
Forbes, J. W.	Dover	Hillsboro
Gillies, N.	Greenville	Madison
Gomme, W. H.	Brooksville	Hernando
Henry, J. C.	Live Oak	Suwanee
Hiers, D. C.	Jennings	Hamilton
Jameson, W. E.	Keysville	Hillsboro
Lightfoot, J. P.	Gainesville	Alachua
McInturff, E. H.	West Tocoi	Clay
Morgan, A. S.	Greenville	Madison

Name	Postoffice	County or State
Patterson, E. L.	White Springs	Hamilton
Peterson, A. E.	Groveland	Lake
Stanaland, B. P.	Wimauma	Hillsboro
Szady, A. J.	Gainesville	Alachua
Wells, J. H., Jr.	Baldwin	Duval
Williamson, E. P.	Groveland	Lake

COLLEGE OF ENGINEERING

Seniors

Name	Postoffice	County or State
Bailey, U. C.	Gainesville	Alachua
Blount, U. F.	Lakeland	Polk
Cappelman, H. L.	Ocala	Marion
Freeman, H. E.	Starke	Bradford
Hallowes, J. P.	Green Cove Springs	Clay
Joyner, R. L.	Bartow	Polk
Ward, S. R.	Brooker	Bradford

Juniors

Hall, H. A.	Green Cove Springs	Clay
Hamilton, G. D.	Bartow	Polk
Holland, F. L.	Orlando	Orange
Little, J. P.	Gainesville	Alachua
Moseley, G. R.	Gainesville	Alachua
Nelson, G. E.	Dunedin	Pinellas
VanCamp, R. K.	Punta Gorda	DeSoto

Sophomores

Braymer, C. J.	Bradentown	Manatee
Bushnell, B. E.	Tampa	Hillsboro
Heller, M.	Jacksonville	Duval
Merrin, R. G.	Plant City	Hillsboro
Rosenthal, J.	Tampa	Hillsboro
Sweet, C. W.	Leesburg	Lake

Freshmen

Barlow, L. W.	Anniston	Alabama
Barns, T. J.	Plant City	Hillsboro
Barstow, L. S.	Palatka	Putnam
Bate, C. W.	Chase	Hillsboro
Cowsert, J. T.	Tarpon Springs	Pinellas
Damon, F. N.	Tallahassee	Leon
Fuller, A. H.	Nichols	Polk
Goldsby, J. K.	Fort Myers	Lee
Hayford, W.	Portsmouth	New Hampshire
Johnson, C. L.	Coleman	Sumter
Jones, E. L.	Tampa	Hillsboro
Lanier, R. E.	Madison	Madison
Lee, R. E.	Gainesville	Alachua
Mackay, R. A. D.	Ocala	Marion
Moorhead. J. R., Jr.	Ocala	Marion
Padgett, H. D.	St. Augustine	St. John
Pratt, L. B.	Jacksonville	Duval
Reverly, D. S.	South Milbrook	New York
Seymour, F. A.	Bartow	Polk
Sweat, D. B.	Manatee	Manatee
Wyckoff, J. S., Jr.	Citra	Marion

Specials

Benedict, L. K.	Hastings	St. John
McRae, W. A., Jr.	Baldwin	Duval

Name	Postoffice	County or State
Peacock, A. J.	Bronson	Levy
Spencer, L. P.	Palm Beach	Palm Beach
Stephens, T. M.	Charlotte Harbor	DeSoto
Wall, P. H.	Tampa	Hillsboro
Whitmire, W. A.	Milton	Santa Rosa

COLLEGE OF LAW

Seniors

Name	Postoffice	County or State
Barrs, N.	Gainesville	Alachua
Bowers, R. D.	Gainesville	Alachua
Boyer, C. A.	Jacksonville	Duval
Bryant, T. W., B.S.	Lakeland	Polk
Carter, F. B., Jr.	Pensacola	Escambia
Futch, L. E.	St. Petersburg	Pinellas
Hale, F.	Brooksville	Hernando
Hampton, F. J.	Gainesville	Alachua
Johns, E. M.	Starke	Bradford
Johnson, Lee, B.S. (Nat'l Greek Acad. of Constantinople)	Gainesville	Alachua
Jarrell, R. L., A.B.	Kissimmee	Osceola
Leitner, S., A.B.	Kissimmee	Osceola
Lotspeich, A. A.	Gainesville	Alachua
Maguire, R. F.	Ocoee	Orange
May, P. S., A.B.	Jacksonville	Duval
Newman, L. B.	Jacksonville	Duval
Petteway, H. C., A. B. (University of North Carolina)	Brooksville	Hernando
Petteway, W. R., A.B. (University of North Carolina)	Tampa	Hillsboro
Rabinovic, A. M.	Tampa	Hillsboro
Rush, H. L.	Gainesville	Alachua
Sawyer, H. S., A.B. (Guilford College, Guilford, N. C.)	Merritt	North Carolina
Shuman, J. H.	Monticello	Jefferson
Solomon, J. B.	Hilliard	Nassau
Stewart, J. B.	Hilliard	Nassau
Talley, R. E.	St. Petersburg	Pinellas
Trammel, C. G.	Lakeland	Polk
Upchurch, F. D.	Jacksonville	Duval
White, R. R., A.B.	Starke	Bradford
Wiggins, E. E.	Hawthorne	Alachua
Williams, J. E., A.B.	Haskell	Polk
Wilson, B. C.	Bartow	Polk

Juniors

Barco, E. T., A.B.	Tampa	Hillsboro
Barker, W. J.	Jacksonville	Duval
Barlow, I. P.	Evergreen	Alabama
Beville, U.	Clearwater	Pinellas
Bird, T. B., A.B.	Monticello	Jefferson
Burger, D. E.	New Rochelle	New York
Campbell, J. R., A.B. (Palmer College, DeFuniak Springs)	DeFuniak Springs	Walton
Ferguson, R. B.	Ocala	Marion
Hamrick, R. E.	Aucilla	Jefferson
Hatton J. W.	Tampa	Hillsboro
Holland, S. L., Ph.B. (Emory College, Oxford, Ga.)	Bartow	Polk
Knowles, G. B.	Greenwood	Jackson

Name	*Postoffice*	*County or State*
Lamson, H.	Jacksonville	Duval
MacWilliams, R. E.	St. Augustine	St. John
McGuire, T. W.	Chicago	Illinois
Myers, W. B., A.B. (Princeton University, Princeton, N. J.)	Tallahassee	Leon
Olliphant, H. K.	Bartow	Polk
Robles, O. S.	Tampa	Hillsboro
Scofield, M. C.	Inverness	Citrus
Sikes, J. F.	Punta Gorda	DeSoto
Swanson, T. J., A.B.	Gainesville	Alachua
Thompson, H. L., B.S.	Gainesville	Alachua
Thompson, H. W.	Milton	Santa Rosa
Upchurch, J. J.	Jacksonville	Duval
Walden, L. I.	Dover	Hillsboro
Whitehurst, G. W.	Wauchula	DeSoto
Whitehurst, W. W.	Wauchula	DeSoto
Williams, O. E.	Haskell	Polk
Yonge, J. E., A.B. (Washington and Lee University)	Tallahassee	Leon
Wilkinson, S A. B.	Jacksonville	Duval

Specials

Andrews, G. A., A.B. (Dartmouth), LL.B., (University of Nebraska)	Bartow	Polk
Cornelison, R. P.	Lakeland	Polk
Cowles, J. S.	Jacksonville	Duval
McGeachy, W. A.	Dade City	Pasco
Oates, W. H.	Hendersonville	Calhoun
Ott, R. V.	Gainesville	Alachua
Poppell, T. J.	New River	Bradford
Reed, C. E.	Bartow	Polk
Shaw, W. B.	Ybor City	Hillsboro
Williams, L. R.	Wilmarth	Suwanee

TEACHERS COLLEGE

Seniors

Name	*Postoffice*	*County or State*
DeWolf, H. L.	Crescent City	Putnam
Embry, W. E.	Dade City	Pasco
Knowles, G. B.	Greenwood	Jackson
Mason, F. R.	Macclenny	Baker
Poppell, T. J.	New River	Bradford

Juniors

Adams, B. D.	Gainesville	Alachua
Blackburn, L. L.	Bowling Green	DeSoto
Green, R. A.	New River	Bradford
Hollingsworth, C. I.	Fort Meade	Polk
McCall T. E.	Jasper	Hamilton
Wilson, W. D.	Westville	Holmes

Sophomores

Hatcher, F. G.	Gainesville	Alachua
McAlpin, I. M.	Mayo	Lafayette

Freshmen

Long, C. W.	Mayo	Lafayette
Robinson, T. R., Jr.	Milton	Santa Rosa
Russell, M. E.	Key West	Monroe
Sistrunk, O. C.	Montbrook	Levy

Specials

Name	*Postoffice*	*County or State*
Grundahl, G.	Gainesville	Alachua
Vetter, P.	Jacksonville	Duval

NORMAL

Name	*Postoffice*	*County or State*
Barrows, G. W.	Baker	Santa Rosa
Bayless, C. A.	Umatilla	Lake
Brook, T. A.	Holt	Santa Rosa
Cartwright, J. W.	Jay	Santa Rosa
Cason, S. W.	Otter Creek	Levy
Cobb, C. C.	Olustee	Baker
Cogburn, P. H.	Cottondale	Jackson
Graham, George R.	Fort White	Columbia
Hall, G. W.	Botts	Santa Rosa
Hanson, J.	Jay	Santa Rosa
Harper, H. C.	Gainesville	Alachua
Helm, G. L.	Harold	Santa Rosa
Herlong, W. V.	Lake City	Columbia
Johnson, H. C.	Holt	Santa Rosa
Maddox, Paul	Ft. Meade	Polk
Mann, J. P.	Hendrickson	Missouri
Mires, J. J.	Trenton	Alachua
Montague, J.	Lake City	Columbia
O'Haver, P. C.	Green Springs	Pinellas
Rhoden, Ernest	Glen St. Mary	Baker
Scott, Clyde	Westbay	Washington
Sowell, C.	Gainesville	Alachua
Walker, Chris	Glen St. Mary	Baker
Webane, W. N.	Suffolk	Virginia

PRACTICE HIGH SCHOOL

Fourth Year

Name	*Postoffice*	*County or State*
Burleigh, E. I.	Tavares	Lake
Clyatt, G. G.	Micanopy	Alachua
Crawford, H. C., Jr.	Tallahassee	Leon
Duncan, W. S.	Tavares	Lake
Echols, H. E.	Jay	Santa Rosa
Fuller, J. K.	Orlando	Orange
Gray, L. A.	Hinson	Gadsden
Jordan, W. H.	Jacksonville	Duval
Knight, K. K.	Dupont	St. John
Lynch, W. H.	Gainesville	Alachua
McCallum, H. H.	Alachua	Alachua
McElya, Will	Gasparilla	DeSoto
Marshburn, F. B.	Bronson	Levy
Redstone, H. G.	Eau Gallie	Brevard
Reeves, W. H.	Tallahassee	Leon
Smith, Dewey	Center Hill	Sumter
Smith, Harry	Center Hill	Sumter
Stoutamire, R.	Tallahassee	Leon
Thomas, L. G.	Baldwin	Duval
Thrower, J. S.	Tampa	Hillsboro

Third Year

Name	*Postoffice*	*County or State*
Burr, C. E.	Tallahassee	Leon
Diamond, W. D.	Jay	Santa Rosa
Doss, G. L.	Astor	Lake
Duncan, C. E.	Tavares	Lake
Durrance, T. J.	Bowling Green	DeSoto
Futch, E. C.	Dade City	Pasco
Hinson, G. W.	Hinson	Gadsden
Hodgson, A. M.	Eau Gallie	Brevard
Lockey, A. H.	Esto	Holmes
Miller, G. F.	Bonifay	Holmes
Mixon, H. J.	Williston	Levy
Mixon, J. A.	Williston	Levy
Odom, E. S.	Munson	Santa Rosa
Smith, C. U.	Williston	Levy
Wilson, H. L.	Bartow	Polk
Yonge, H. C.	Fairfield	Marion
Phillips, J. G.	Panama City	Washington
Watts, R. D.	Panama City	Washington

UNIVERSITY SUMMER SCHOOL (CO-EDUCATIONAL)

(1914)

Name	*Postoffice*	*County or State*
Adams, B. D.	Gainesville	Alachua
Allen, Florida	Lecanto	Citrus
Allen, Ola	Largo	Pinellas
Altman, Gertye	Fort Meade	Polk
Anderson, Florence	Tampa	Hillsboro
Ayers, Daisy	Brooksville	Hernando
Bailey, Mrs. M. E.	Gainesville	Alachua
Baird, Hattie	Gainesville	Alachua
Barker, Mary E.	Clearwater	Pinellas
Barrett, Mary Belle	Millville	Washington
Barwick, Louise	Deerfield	Palm Beach
Beard, John J.	Anthony	Marion
Beeson, Edward	Bowling Green	DeSoto
Begg, Mrs. J. A.	Titusville	Brevard
Belcher, Frances	Largo	Pinellas
Bellamy, Pearl M.	Eustis	Lake
Bennett, Lawrence	Graceville	Jackson
Biaza, Isabelle	Key West	Monroe
Bigelow, Mary E.	Inverness	Citrus
Bishop, C. P.	Eustis	Lake
Boswell, Fannie	St. Petersburg	Pinellas
Brachhold, Elizabeth	Daytona	Volusia
Brachhold, Margaret	Daytona	Volusia
Bradford, Gladys	Dade City	Pasco
Branch, Beatrice	Webster	Sumter
Brooks, Frankie	Cocoanut Grove	Dade
Brown, Annie J.	Fort Pierce	St. Lucie
Buchannan, Bessie	Bunnell	St. John
Burrows, Mrs. L. P.	Brooksville	Hernando
Bushong, V. S.	Plant City	Hillsboro
Butts, Mildred	Dade City	Pasco
Caldwell, Robt. T.	Lochloosa	Alachua
Campbell, C. G.	Jacksonville	Duval
Cannon, Mary Amanda	Gainesville	Alachua
Carpenter, J. A.	Montverde	Lake
Chapman, Mattie	Plymouth	Orange

Name	Postoffice	County or State
Churchill, Frank	Webster	Sumter
Clement, Josie	Bartow	Polk
Cochran, Mrs. Cora	Perry	Taylor
Collier, E. H.	Hastings	St. John
Collins, Althea	Dade City	Pasco
Connor, Albert B.	Belleview	Marion
Cook, Frank R.	Grandin	Putnam
Cooper, Katharine	Clearwater	Pinellas
Crews, Aaron	Worthington	Bradford
Crow, Pearl	Webster	Sumter
Cunningham, Helen	Dade City	Pasco
Dampier, Johnnie	Alachua	Alachua
Davis, Bertha	Wabasso	St. Lucie
Dawson, Gamma	Wauchula	DeSoto
DeLaney, Eunice	Orlando	Orange
Dewey, Vera	Inverness	Citrus
Dilzer, Frances	New Smyrna	Volusia
Dormany, Seay	Perry	Taylor
Draper, Stephen	Lake Butler	Bradford
Dreher, Ruth	Micanopy	Alachua
Dunlap, Alice	Detroit	Dade
Durrance, Vera	Fort Meade	Polk
Echols, Harvey	Jay	Santa Rosa
Eckland, Florence	Tampa	Hillsboro
English, Flora Jean	Alva	Lee
Ethelridge, Ethel	Perry	Taylor
Evans, Mrs. W. T.	Belleview	Marion
Ezell, Boyce	Sanford	Orange
Finney, W. C.	Floral City	Citrus
Fisher, Nelle	Wauchula	DeSoto
Fletcher, Gertrude	Tyler	Alachua
Folks, Rae	Juliette	Marion
Force, Harley	Daytona Beach	Volusia
Foss, Marion	Ybor City	Hillsboro
Frank, Lena	Floral City	Citrus
Freeman, Edwin	Starke	Bradford
Fryer, M. N.	Gainesville	Alachua
Futch, Cedora	Dade City	Pasco
Futch, Ivey Edward	Lake City	Columbia
Fuqua, Ella A.	Gainesville	Alachua
Gainey, Bessie	Millville	Washington
Gatchell, Pauline	St. Augustine	St. John
Gause, Bruce	Astatula	Lake
Geiger, Cephas	Zephyrhills	Pasco
Gladwin, Susan	Titusville	Brevard
Goff, Russell	Live Oak	Suwanee
Grable, Florence	Tampa	Hillsboro
Graham, T. W.	Istachatta	Hernando
Green, C. D.	McAlpin	Suwanee
Gross, A. J.	Homeland	Polk
Groves, Minnie	Orlando	Orange
Guess, Mary C.	Williston	Levy
Gustafson, Ethel	Homeland	Polk
Gutschlag, Marguerite	Martin	Marion
Hague, Mary	Gainesville	Alachua
Hall, Mary	Orange Heights	Alachua
Halliday, Alma G.	Daytona Beach	Volusia
Hamer, Mary Russell	Hurtsboro	Alabama
Hampton, Irene	Brooksville	Hernando
Hampton, Mattie	Labelle	Lee
Hane, Emma	Fruitland	Putnam
Hanna, Mary	Wauchula	DeSoto

Name	*Postoffice*	*County or State*
Harding, Florida	Apalachicola	Franklin
Harper, H. C.	Madison	Madison
Harrell, Ira	Socrum	Polk
Harrison, B. F.	Gainesville	Alachua
Harrison, Edythe	Gainesville	Alachua
Hathaway, Mrs. W. B.	Gainesville	Alachua
Haseltine, Hubert	Bartow	Polk
Hawkins, Jessie N.	Alachua	Alachua
Haycroft, Sue	Ocala	Marion
Hayes, John T.	Webster	Sumter
Hayes, Susie	Webster	Sumter
Henderson, Lucile	Dade City	Pasco
Hendrick, Mrs. Carinne	Lake City	Columbia
Herr, Lucy J.	Wabasso	St. Lucie
Highsmith, Edwin McKay	New Smyrna	Volusia
Hill, Naoma F.	Dade City	Pasco
Hilton, Emma A.	Alachua	Alachua
Himes, Whitney B.	West Palm Beach	Palm Beach
Hodge, Frances Alberta	Jacksonville	Duval
Holder, Belle	Alachua	Alachua
Holt, Pearl A.	Wabasso	St. Lucie
Hollingsworth, C. I.	Fort Meade	Polk
Howard, Ola E.	Madison	Madison
Hunt, Jessie	Brooksville	Hernando
Hunter, Pearl D.	Winter Park	Orange
Ingram, Mary H.	New Smyrna	Volusia
Iseley, Mrs. L. H.	Burlington	North Carolina
Johns, H. L.	Wellborn	Suwanee
Johnson, Ethel	Floral City	Citrus
Johnson, Garda	Inverness	Citrus
Johnson, Genevieve	Webster	Sumter
Johnson, Lillian	Brooksville	Hernando
Johnson, Myrtle	Webster	Sumter
Johnson, O. L.	Vernon	Washington
Johnson, Sarah	Perry	Taylor
Judy, Marjorie	Fort Meade	Polk
Kellogg, Annie	Labelle	Lee
Kennedy, Cora	Brooksville	Hernando
Kersey, Shelley	Quay	St. Lucie
Kilgore, Rosa	Largo	Pinellas
King, Eleanor	Ft. Lauderdale	Dade
Laffitte, Elsie	Center Hill	Sumter
Lamb, Albert	Center Hill	Sumter
Lamon, Mabel	Gainesville	Alachua
Lander, Bryan	Delray	Palm Beach
Lander, C. H.	Delray	Palm Beach
Latimer, Edna	Island Grove	Alachua
Latimer, Mrs. Lula	Island Grove	Alachua
Law, Ada Cooper	Brooksville	Hernando
Layton, Louie	Lakeland	Polk
Lewis, Gertrude	Gainesville	Alachua
Liddy, Marion F.	West Palm Beach	Palm Beach
Lightner, Jean	Bucklin	Kansas
Love, Bertha Lee	Trenton	Alachua
Love, Lillie	Trenton	Alachua
Lowry, Medora	Brooksville	Hernando
Lucas, Annie M.	Inverness	Citrus
Macy, Mrs. Martha	Eau Gallie	Brevard
Maddox, Paul	Fort Meade	Polk
Magill, Mattie	Labelle	Lee
Maney, Elizabeth	Plant City	Hillsboro
Mann, Jennie May	Wauchula	DeSoto

Name	Postoffice	County or State
Mann, Joice	Sutherland	Pinellas
Mann, J. W.	Oklawaha	Marion
Mann, Mamie	Sutherland	Pinellas
McCann, Marie	Punta Gorda	DeSoto
McDonald, Clara	Gainesville	Alachua
McElroy, Durlie	Ft. White	Columbia
McEwen, R. O.	Lochloosa	Alachua
McMullen, Frances	Largo	Pinellas
Miles, Maggie	Bartow	Polk
Miller, E. H.	Fairfield	Marion
Miller, Irene	Montbrook	Levy
Miller, Nellie	Crystal River	Citrus
Moore, Grace	Island Grove	Alachua
Morgan, W. H.	Crystal River	Citrus
Morse, Clara M.	Grant	Brevard
Morse, Lois	Valkaria	Brevard
O'Haver, P. C.	Palatka	Putnam
O'Neal, Mamie	Largo	Pinellas
Orr, James Lawrence	Ft. Myers	Lee
Owens, Ollie M.	Wilcox	Alachua
Patch, Maude H.	Orlando	Orange
Patch, Phoebe Pearl	Orlando	Orange
Pattishall, Blanche	Geneva	Orange
Pearson, Mrs. Vera	White Springs	Hamilton
Perry, Jennie May	Levon	Marion
Pitts, Fannie Curtis	Gainesville	Alachua
Plumb, Kathleen G.	Belleair	Pinellas
Primrose, May N.	Greenville	Mississippi
Proctor, Willie	Eureka	Marion
Quinn, Leila	Floral City	Citrus
Ray, Mollie E.	Orlando	Orange
Ray, Olive Elizabeth	Starke	Bradford
Read, Alice M.	New Smyrna	Volusia
Reynolds, Mary L.	Leesburg	Lake
Rhoden, Guss M.	Macclenny	Baker
Rhoden, Walter R.	Macclenny	Baker
Rice, Jennie May	Dunedin	Pinellas
Ricks, Ruby	Gainesville	Alachua
Riherd, V. M.	Lake Butler	Bradford
Riley, R. R.	Jasper	Hamilton
Roberts, Aaron K.	Barberville	Volusia
Roberts, Clarise	Key West	Monroe
Roberts, John P.	Barberville	Volusia
Roberts, Walter	Gainesville	Alachua
Robinson, Ethel A.	Belleview	Marion
Robinson, Mrs. E. L.	Tampa	Hillsboro
Russell, Mary Elizabeth	Glenwood	Volusia
Sale, Essie B.	Gainesville	Alachua
Salter, Kathryn	Brooksville	Hernando
Saunders, Wm.	Lloyd	Jefferson
Schenck, B. Birdina	Wauchula	DeSoto
Schobert, Ida M.	Lakeland	Polk
Shands, Coris	Gainesville	Alachua
Shands, Velma	Gainesville	Alachua
Shannon, Serena	Gainesville	Alachua
Shaver, D. B.	Wauchula	DeSoto
Shell, Mary Fay	Tampa	Hillsboro
Sigmon, Sallie M.	Weirsdale	Marion
Sistrunk, Otis	Montbrook	Levy
Slaght, Fannie Louise	Lake Wood	Ohio
Slagle, Dean	Gainesville	Alachua
Smith, Elizabeth	Bartow	Polk

Name	*Postoffice*	*County or State*
Smith, Elsie Vermily	Gainesville	Alachua
Smith, Frank Adams	Jasper	Hamilton
Smith, Pearl	Wauchula	DeSoto
Solomon, Louise	Key West	Monroe
Sowell, Clarence	Westlake	Hamilton
Sparks, Mamie	Louise	Alachua
Springstube, Nora	Walton	St. Lucie
Stalker, Ethel M.	Plant City	Hillsboro
Starck, Lena	Jensen	St. Lucie
Stewart, Edith	Sanford	Orange
Strickland, Alice	Waldo	Alachua
Strickland, Dollie	Montbrook	Levy
Sumner, Glenn	St. Petersburg	Pinellas
Sumner, Ruth	St. Petersburg	Pinellas
Swilley, Clements	Trenton	Alachua
Syfrett, J. M.	Gainesville	Alachua
Taylor, Mamie	Oak Hill	Volusia
Taylor, Martha	Rocky Point	Alachua
Taylor, Pearle	Taylor	Baker
Teeter, Lottie	Hawthorn	Alachua
Terrell, W. R.	Coleman	Sumter
Thalimer, Howard	DeFuniak Springs	Walton
Thitchener, A. C.	New Augustine	St. John
Thomas, Clara	Gainesville	Alachua
Thomson, Anna Blair	Gainesville	Alachua
Tison, S. A.	Montbrook	Levy
Tompkies, Kate	Gainesville	Alachua
Tracy, R. I.	Loyce	Pasco
Treadwell, Annie	Gainesville	Alachua
Tribble, Bess Claire	Lake City	Columbia
Tucker, Altha	San Antonio	Pasco
Tucker, Mrs. Leonora	Delray	Palm Beach
Turner, Mable	Auburndale	Polk
Turner, Maude	Auburndale	Polk
Vause, Emily	Archer	Alachua
Vroomay, Mrs.	Gainesville	Alachua
Wakefield, Rosalie	Apalachicola	Franklin
Walker, Flora	Sanford	Orange
Wilder, Albert	Orange	Liberty
Williams, G. H.	Waldo	Alachua
Wilson, W. D.	Westville	Holmes
Witt, Mathew	Gainesville	Alachua
Wood, Sarah Augusta	Evinston	Alachua
Wynn, Fannie	Montbrook	Levy
Youngblood, Joe A.	Stuart	Citrus
Zellner, Arnold	Floral City	Palm Beach

SUMMARY

Graduate School		6
College of Arts and Sciences		80
College of Agriculture—		
a. College	35	
b. Middle Course	19	
c. Two-Year Course	16	
d. One-Year Course	11	
e. Four-Month Course	3	
f. Ten-Day Course for Farmers	25	
		109
College of Engineering		48
College of Law		71
Teachers College and Normal School—		
a. College	19	
b. Normal School	24	
c. Summer School	269	
d. Practice High School	38	
		350
TOTAL ENROLLMENT FOR 1914-15		664
Counted twice		17
NET TOTAL		647

SUMMARY BY STATES AND FOREIGN COUNTRIES

Alabama	4
China	1
Georgia	3
Florida	625
Illinois	2
Kansas	1
Massachusetts	1
Michigan	1
Minnesota	2
Mississippi	1
Missouri	3
New Hampshire	1
New York	5
North Carolina	2
Ohio	2
Pennsylvania	4
South Carolina	1
Tennessee	2
Virginia	1
Wisconsin	2
TOTAL	664
Counted twice	17
Net Total	647

INDEX

	Page
A.B. Curriculum	50
A.B. Curriculum in Education	130
A.B. in Education	129
Administration	24
Admission	36, 91, 101, 117, 129, 143
Admission to the Bar	120
Advanced Standing	44, 117
Agent, State	155
Agents, County	156
Agents, County Canning Clubs	153
Agents, District	156
Agents, Farmers' Cooperative Demonstration Work	152
Agricultural Club	73
Agricultural Curriculum	78
Agricultural Education	85
Agricultural Engineering	74, 83, 84
Agricultural Equipment	23, 73
Agricultural Experiment Station	167
Agricultural Hall	18, 73
Agricultural Meetings	99
Agriculture	43, 135
Agriculture, College of	72, 176
Agriculture, Middle Course in	91
Agriculture, Short Courses in	94
Agronomy	83, 139
Agronomy Equipment	74
Alligator, Florida	36
Alumni Association	35
Ancient Languages	52
Animal Husbandry	87
Animal Husbandry, Equipment	75
Annual	36
Annual Reports	169
Arts and Sciences, College of	48, 174
Arts, Mechanic	110, 112, 115
Astronomy	64
Athletic Equipment	24
Athletics	29, 150
Bacteriology	55
Band	13, 150
Bar, Admission to the	120
Battalion	13
Beef Production	88
Benton Engineering Club	99
Biblical Instruction	53
Biology	54
Board (see Expenses)	
Board of Control	8, 24
Board of Education, State	8
Books	32, 119
Botany	43, 56
Boys' Corn Clubs	156
B.S. Curriculum	51
B.S.C.E. Curriculum	103
B.S. Curriculum in Agriculture	79
B.S. Curriculum in Education	130
B.S.E.E. Curriculum	104
B.S.M.E. Curriculum	105
Breeding History	88
Breeds of Animals	88

Page
Buildings 17
Buildings, Roads, Irrigation and Drainage 85
Bulletins 166, 169
Bureau, Teachers' Employment 145
Buttermaking 90
Cabinet Work 113
Cadet Officers 13
Calendar 6
Canning Clubs 157
Carpentry 112
Carving, Wood 113
C.E. 102
Certificate 36, 91
Certificates, County 135
Certificates, State 128
Changes in Studies 28
Charges, University 30
Chemistry 44, 57, 143
Child Study 132
Circulars 170
Citrus, Culture, etc. 86
Civics 142
Civil Engineering 107
Civil Engineering Curriculum (see B.S.C.E. Curriculum)
Civil Government 136
Classical Course (see A.B. Curriculum)
Clubs (see Student Organizations)
College of Agriculture 72, 176
College of Arts and Sciences 48, 174
College of Engineering 100, 178
College of Law 116, 179
College, Teachers 129, 180
Committees, Standing 12
Computing-Room 23
Conditions 27
Conformation, Animal 89
Contracts 109
Control, Board of 8
Cooperative Demonstration Work, Farmers' 152
Corn Clubs, Boys' 156
Correspondence Courses 97, 145
Council, University 8, 24
County Agents 152, 156
County Canning Clubs, Agents for 153
County Certificates 135
Course of Instruction, College of Law 120
Courts, University Practice Courts 117
Credits for Practical Work 77
Cultivated Plants, Evolution of 87
Dairying 87, 90
Deans 24
Debating Society, John Marshall 119
Deciduous Fruits 87
Deficiencies 38
Degrees 29, 46, 49, 51, 77, 101, 120, 129, 172
Demonstration Agents 152
Demonstration Agents, School for 157
Demonstration Work, Farmers' Cooperative 154
Departments (see Organization)
Departments, Special 149
Descriptive Geometry 111

	Page
Descriptive Geometry Problems	112
Design, Machine	112
Director	24, 155
Discipline	25
Diseases, Animal	89
Diseases, Citrus	86
Dissertation	47
District Agents	156
Division of University Extension	151
Donations (also see Gifts)	75
Drafting-Room	23
Drainage	85
Drawing	110, 112
Earning Expenses, Opportunities for	34, 78
Economics	61, 62
Education	131, 137
Education, Curriculum in	130
Education, Secondary	14, 132
Education, State Board of	8
E.E.	102
Electrical Engineering	109
Electrical Engineering Curriculum	102
Elementary Professional Course (for Teachers)	137
Employment Bureau	145
Endowment	19
Engineering Club	101
Engineering, College of	100, 178
Engineering Curriculum	103
Engines	111
English	39, 136, 138, 141
English Language and Literature	59
Entrance Requirements (see Admission)	
Equipment	20, 73, 100, 159
Ethics	68
Examinations	28, 37, 117
Expenses	30, 97
Experiment Station, Agricultural	167
Expression	149
Extension Teaching	85
Extension, University	151
Evolution of Cultivated Plants	87
Faculty	9, 25, 48, 72, 100, 116, 127, 146
Faculty Committees	12
Failure in Studies	28
Farmers' Cooperative Demonstration Work	154
Farmers' Institutes	159
Farmers' Institutes, Officers of Local	163
Farmers' Institutes, Speakers at	162
Fees	30, 149
Fellowships	33
Field Instruction	157
Forest Mensuration	87
Forestry	87
Forge	113
Foundry	113
French	42, 66, 141
Fruits, Deciduous and Subtropical	87
Funds (see also Endowment)	154
Furniture Construction	113
Gardening, Landscape	87
Gas Engines	111

Page
Gears, Valve 110
Geography 43, 136, 138
Geology 56
Geometry, Descriptive 111, 112
German 42, 66
Gifts to the University 14
Girl's Canning Clubs 157
Glee Club 149
Government 24
Government, Civil 136
Grades 28
Graduate in Farming 91, 92
Graduate School 46, 174
Graphic Statics 108
Graphic Statics of Machinery 110
Greek 53
Greenhouse Management 86
Grounds 17
Groups 49, 78
Gymnastics 150
Hazing 25
Heat Engines 111
High School Inspection, State 145
High School, Practice 143, 181
High School Teachers, Special Courses for 133
History 41, 54, 61, 137, 138, 141
History of Education 131
History of the University 14
Honors 30, 172
Horticultural Equipment 76
Horticulture 85, 139
Husbandry (see Animal Husbandry)
Hydraulics 108
Hygiene 136
Hygiene, Animal 89
Infirmary 31
Insects, Citrus 86
Inspection, State High School 145
Inspection, State Nursery Stock 170
Institutes, Farmers', etc. 150
Institute Train 160
Investigation, Lines of 168
Irregular Students 27, 28
Kinematics of Machinery 110
Laboratories 21, 127
Landscape Gardening 87
Latin 41, 52, 142
Law, College of 116, 179
Lecturers, Special 72, 116
Library 20, 74, 118
Literary Courses (see A.B. Curriculum)
Literary Societies 36, 49
Literature, English 59
LL.B. Curriculum 120
Loans 75
Location 17, 167, 171
Lodging (see Expenses)
Logic 68
Machine Design 112
Machine Drawing 112
Machine Shop 113

Page
Machinery, Farm 85
Machinery, Graphic Statics of 110
Machinery, Kinematics of 110
Management, Farm 84
Management, School 131, 138
Mandolin Club 149
Manual Training (see also Mechanic Arts) 142
Marshall Debating Society 119
Materials, Strength of 111
Mathematics 41, 63, 138, 142
M.E. 102
Mechanic Arts 110, 112
Mechanic Arts Curriculum 115
Mechanical Drawing 112
Mechanical Engineering 110
Mechanical Engineering Curriculum 105
Mechanical Technology 114
Mechanics 102
Mechanism 110
Medals (see also Prizes and Honors) 30, 173
Meetings, Agricultural 99
Mensuration, Forest 87
Methods 131, 137, 138
Middle Course in Agriculture 91, 92, 176
Military Organization 13
Military Science and Tactics 64
Milk Inspection 90
Modern Languages 42, 65, 141
Motors, Farm 85
Municipal Engineering 108
Museum 20
Music 36, 149
Normal School 127, 135, 181
Nursery Stock, State Inspection of 170
Nutrition, Animal 89
Officers of the Battalion 13
Officers, Cadet 13
Officers of the University 9
Organization 45, 128, 155
Orthography 136
Patternmaking 113
Peabody Club 127
Peabody Hall (see Gifts) 14
Pedagogy (see Education)
Phi Kappa Phi 30, 173
Philosophy 67
Philosophy of Education 132
Physical Culture 150
Physical Geography 43, 136, 138
Physics 43, 69, 143
Physiology 138
Plant Breeding 87
Plant Propagation 86
Political Geography 136
Political Science 70, 71
Poultry Culture 89
Poultry Practice 90
Practical Work, Credits for 77
Practice Courts 117
Practice High School 143, 181
Practice Teaching 132

	Page
President	24
Principles of Education	132
Privileges, University	119
Prizes (see also Honors and Medals)	30, 119, 173
Produce Contests	160
Professional Course, Teachers College	137
Projections	111
Projects	168
Propagation, Plant	86
Property, Value of University	19
Public Speaking	149
Publications	36, 166, 169, 170
Psychology	67, 127, 131
Railroads	108
Reexaminations	28
Register	172
Regulations	24, 26
Reports	28
Reports, Annual	169
Resources	19
Restrictions (for High School Pupils)	143
Results	157, 161
Review Courses, Spring	135
Reviews and Methods	131, 137, 138
Roll of Students	174
Rural Problems	138
Scholarships	14, 30, 33, 73
School for Demonstration Agents	157
School, Graduate	46, 174
School Management	131, 138
School, Normal	181
School, Practice High	181
School, University Summer	182
Science	138, 143
Scientific Courses (see B.S. Curricula)	
Secondary Education	14, 132
Seminar	89
Seminole	36
Shops	23
Short Courses in Agriculture	94
Short Course in Mechanic Arts	115
Smith-Lever Act	154
Societies, Student	36
Sociology	70
Spanish	43, 67, 143
Speakers (at Farmers' Institutes)	162
Speaking, Public	149
Special Departments	149
Special Students	27, 44, 117, 175, 176, 179, 180
Specifications	109
Spring Review Courses	135
Staff	157, 167
State Agent	155
State Board of Education	8
State Certificates	128
State High School Inspection	145
State Inspection, Nursery Stock	170
Station, Agricultural Experiment	167
Strength of Materials	111
Structural Engineering	109
Student Organizations and Publications	36

	Page
Studies, Regulations Concerning	26
Subjects of Study	49
Subtropical Fruits	87
Summary of Roll of Students	187
Summer School, University	146, 182
Surveying	107
Surveying Instruments	23
Swine Production	89
Tactics, Military	64
Teachers College	127, 129, 180
Teachers, Correspondence Courses for	145
Teachers' Employment Bureau	145
Teachers, Special Courses for	133
Teaching, Practice	132
Teaching, Reviews and Methods of	131, 137, 138
Technology, Mechanical	114
Testing, Dairy	90
Title	91
Training, Manual	142
Train, Institute	160
Trucking	86
Tuition Fees	30, 149
Turning, Wood	112
Types of Animals	88
Uniform	32
Unit Courses	39
University Charges	30
University Council	8, 24
University Extension	151
University, Gifts to	14
University, History of	14
University, Officers of	9
University Summer School	146, 182
Value of University Property	19
Valve Gears	110
Veterinary Elements	89
Vocal Music	149
Weekly (see Alligator)	
Women's Institutes	160
Wood Carving	113
Wood Turning	112
Wood Working	112
Y. M. C. A.	36
Zoology	43, 55

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